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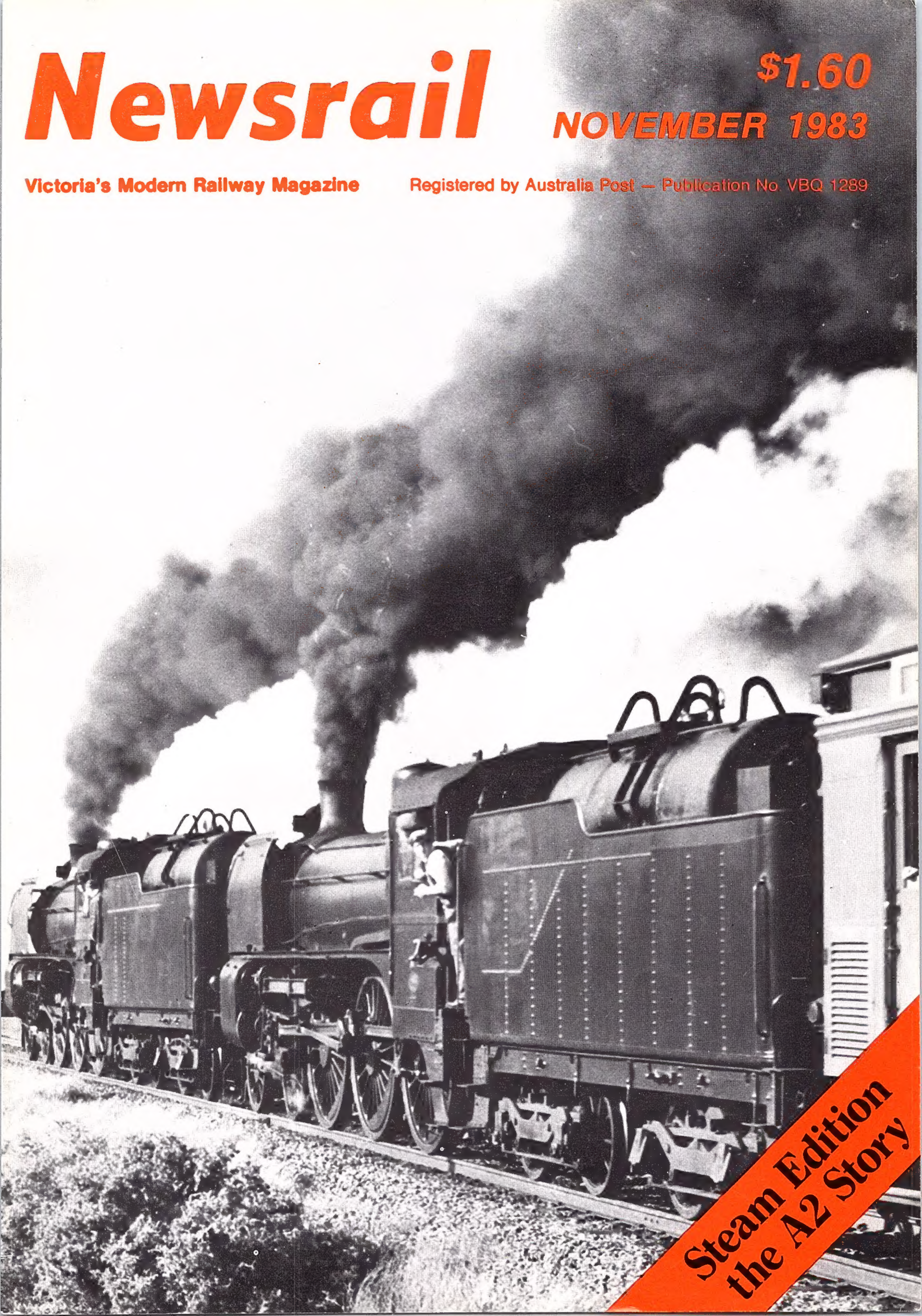
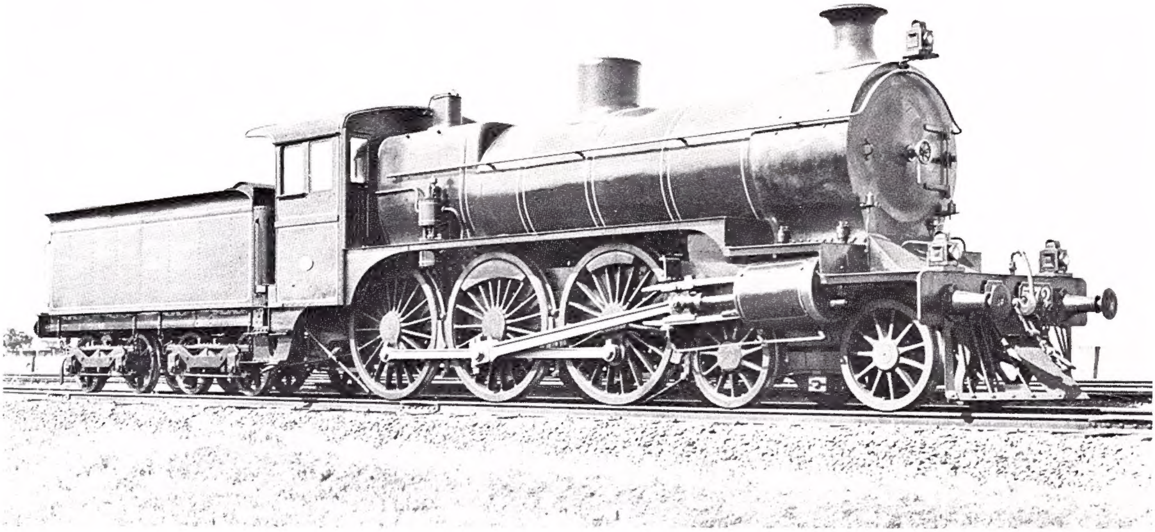
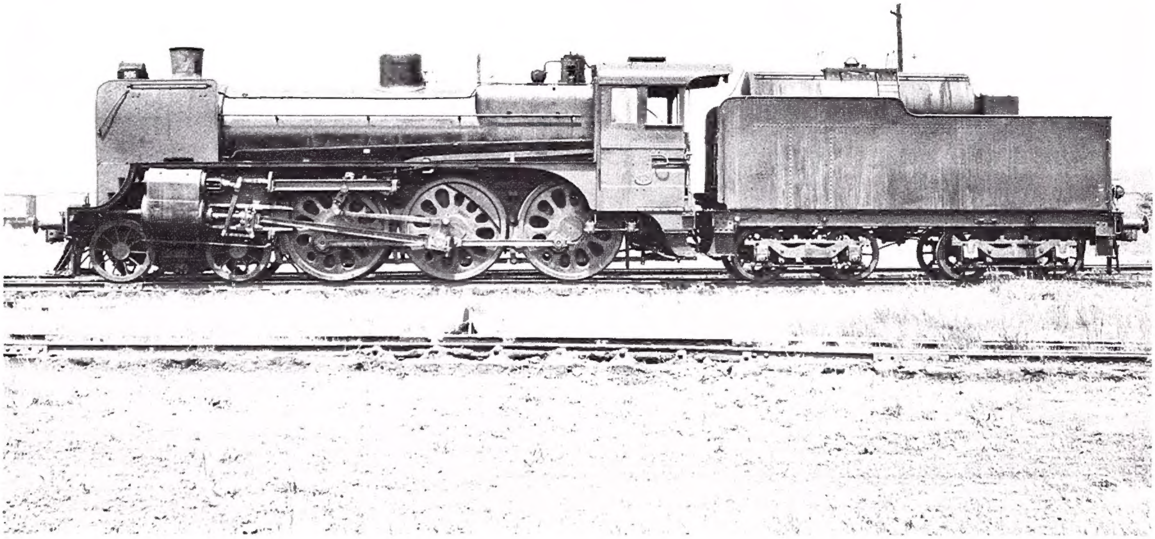


Steam Edition
the A2 Story



PATTERN LOCO
TO FINAL DEVELOPMENT



FOR ALL WHO ARE INTERESTED IN RAILWAYS

Newsrail

Vol. 11 No. 10 November 1983

What is in a name?

For well over 100 years, Victoria was served by the Victorian Railways. While the service may have been slow it was generally looked on as reliable, even if Aunt Freda's bags went to Terang instead of Kerang and the week old chickens ended up week old chooks before they were delivered, everything reached its destination and the customers were happy.

Since the start of the seventies the whole railway scene has changed. Massive line and station closings, numerous small towns losing their goods service with the freight centre system of goods traffic, a scheme doomed to failure from the start. On a brighter note we have seen the mainline passenger service revamped and a general acceptance of this by the travelling public.

The biggest change taking place at the moment is the name of the company. We have gone from the Victorian Railways through VicRail to V/Line. We have two sections of V/Line, the STA for the country and the MTA for the Melbourne metropolitan area. Where we once lived in suburbs we now live in "Met" neighbourhoods.

Let us hope that people will try the services offered and give them a fair go. While nearly everything new has teething problems, time will sort things out and people should get value for money.

Front Cover: A2 986 and 995 storm Ingliston Bank as they head for Ballan on the ARHS mystery tour on 19.8.61. (A R Lyell)

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Opposite above: A2 572, the class leader as originally built in 1907 with its smooth lines and uncluttered appearance.

Opposite below: 964 with Box Pok drivers and 4700 gallon ACN tender for oilfiring. The changes over the years did nothing for their appearance. (VicRail)

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We would like to thank all who have contributed to this issue and look forward to your support in the future. All articles, items and photos are acknowledged at the bottom.

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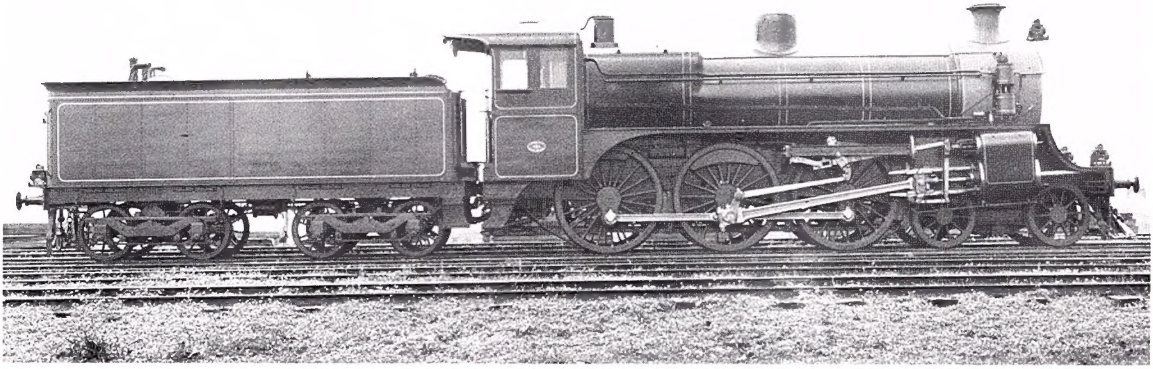
The A2 Story

JOHN BUCKLAND

This article appeared in the "ARHS Bulletin" in 1958.



991 a Walschaert version of the class. (VicRail)

Seventy-six years ago next month (December) the first of a new and at that time very large and powerful 4-6-0 type locomotive, designated as A2 class, was delivered by Newport Railway Workshops, its 51st production. Designed specifically for express passenger service on main lines, the A2 had a profound and lasting effect on steam locomotive practice and traffic operation on the Victorian Railways system for the following half-century.

Certainly the best known (if not loved) of the whole roster of VR steam power, over the years the A2 evolved into one of the most versatile and successful general purpose locomotives ever produced in Australia. Within the span of 13 years no less than 185 A2 locomotives were constructed in VR workshops — all but ten of them at Newport.

For almost 45 years the A2 worked the bulk of interstate expresses, main line passenger and fast freight trains, on all of which it rendered reliable and efficient service. Until the advent of new R class 4-6-4s in 1951 and the all-pervading diesel-electrics, heralded by the B class a year later, the withdrawal and scrapping of these 'over economic age' but still useful steam locomotives began in earnest. Now only six remain preserved, of 31 which remained on the register in 1957.

What might now be termed the 'standard' A2 had evolved by the middle 1930s as a result of much detail modification and improvement, but very few major alterations — a much improved machine in point of fuel economy, performance and maintenance than either the original A2 (Stephenson) of 1907 or A2 (Walschaert) of 1915 versions, as was demonstrated by the wholesale acceleration of schedules and the continued use of these moderate-powered locomotives (for lack of any alternative) on the heaviest and fastest trains, including the *Sydney Limited* (prior to introduction of the S class Pacifics in 1928-30) and *The Overland,* until the arrival of the Hudsons, which were belatedly acquired to replace them.

Express passenger locomotive development on the VR until the beginning of the 20th century had been confined to four-coupled designs with inside cylinders of typical British design. At this period the principal express and passenger trains were worked by Beyer Peacock 'old' A class and their successors the Phoenix Foundry 'new' A class 4-4-0s, assisted by the very much older B class 2-4-0s, produced by several British builders and locally. Probably the first task of the newly constituted Locomotive Design section of the Drawing Office established at Newport Workshops in 1889 under the then Chief Mechanical Engineer (Thomas Hale Woodroffe) was the design of a new high pressure standard boiler for then extant locomotives of classes A, D, E, R and Y, first fruits of Swiss-born Chief Draughtsman, Ernest Victor Siepen, who had come to VR in 1886. He had previously been employed by Beyer Peacock & Co in Manchester.

For some strange reason, Siepen's existence has only recently come to light as hitherto credit for 'design' of VR's post-1900 locomotives has been credited without much foundation in fact to Alfred Ernest Smith (CME 1919-1928). Siepen occupied the senior position in the drawing office until his retirement in 1915 and therefore must be credited (or blamed) for the development of the AA 4-4-0 (1900), DD (1903) and A2 classes, on all of which drawings his initials appear, as chief draughtsman and later as rollingstock engineer and not those of A E Smith, except in the case of some detail drawings. The popular practice of naming as 'designer' the particular CME is, of course scarcely accurate, as few, if any CMEs have time to personally sit at a drawing board to evolve all the details of a new locomotive class!

The two groups of AA class 4-4-0s represented the optimum development of that wheel arrangement in

Australia. They were soon to be supplanted by larger and more powerful 4-6-0 designs then on the drawing board. First, in late 1902 Newport produced the pattern DD class general purpose engine as a logical development of the 1900 AA — narrow cab, low running plate with wheel splashers and all. Concurrently, Siepen envisaged a very much larger and still more powerful 4-6-0, much altered in style with full width pressed steel cab and high level running plates, became the pattern A2 No.572.

Obviously a development of the 1903 version of the AA with its bogie tender, the A2 had outside cylinders 21" x 26" x 6' 1" coupled wheels and a high-pitched well proportioned Belpaire boiler with 200 p.s.i. carrying 263 x 2" tubes with total heating surface of 2220 sq.ft., of which 156 sq.ft. was direct firebox area. The grate area was 29 sq.ft. Another major change from the original 1900 conception was a bogie tender similar to the DD class with 4460 gallons and 5 tons coal capacity. With its tender the roadworthy weight was 109.25 tons, of which 49.9 tons was adhesive.

No.572 was greatly admired when it took the road, with wheels and superstructure painted Canadian red, with dark blue boiler bands, black smokebox and white edge lining on both engine and tender panels. As can be seen from the photograph, the pattern A2 was a large and handsome locomotive, of attractive appearance, having clean and classic lines, which some have attributed to a possible contribution by A F Smith.

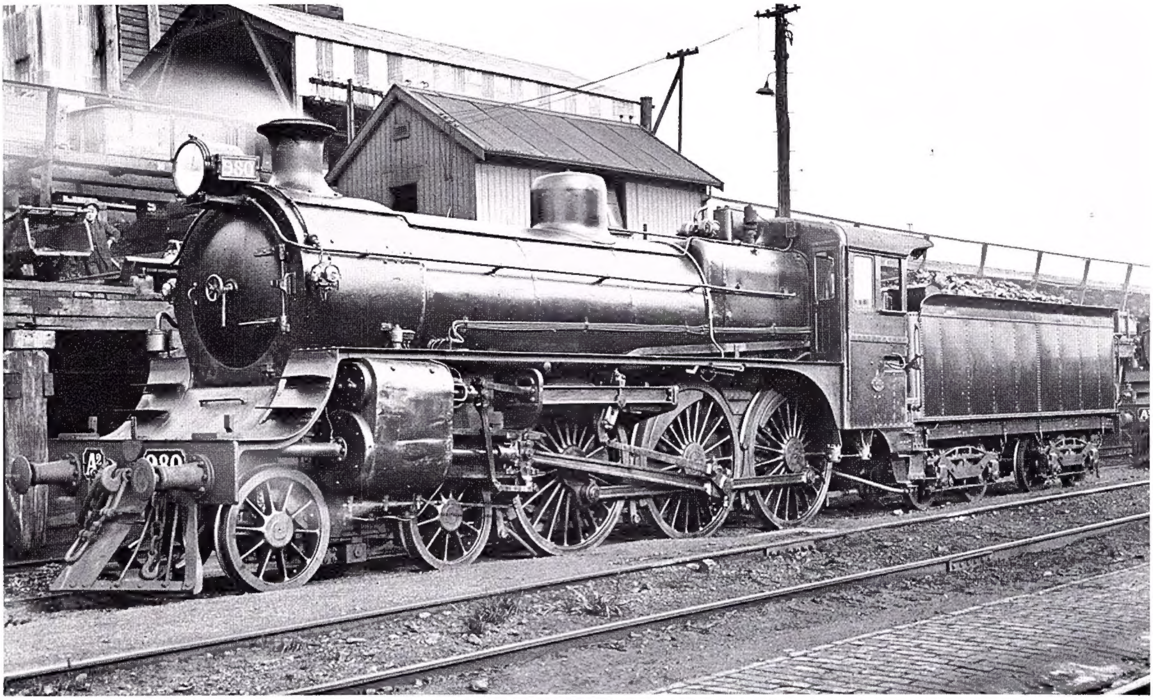
Early modifications and additons

Originally the Westinghouse compressor was mounted at the right side of the firebox, just ahead of the cab. The first five A2s thus built were later standardised about 1910, when the compressor was relocated to the right side of the smokebox. After a brief running-in period, No.572 was soon tried out on the heavy and important *Sydney Express* which until then was invariably double-headed between Melbourne and Seymour in both directions. A year of testing and minor modification in the light of running experience followed to cylinder attachment to the frame, boiler support at the firebox end and other minor details. With its good factor of adhesion, the A2 seldom had any tendency to slip on starting, even under adverse conditions.

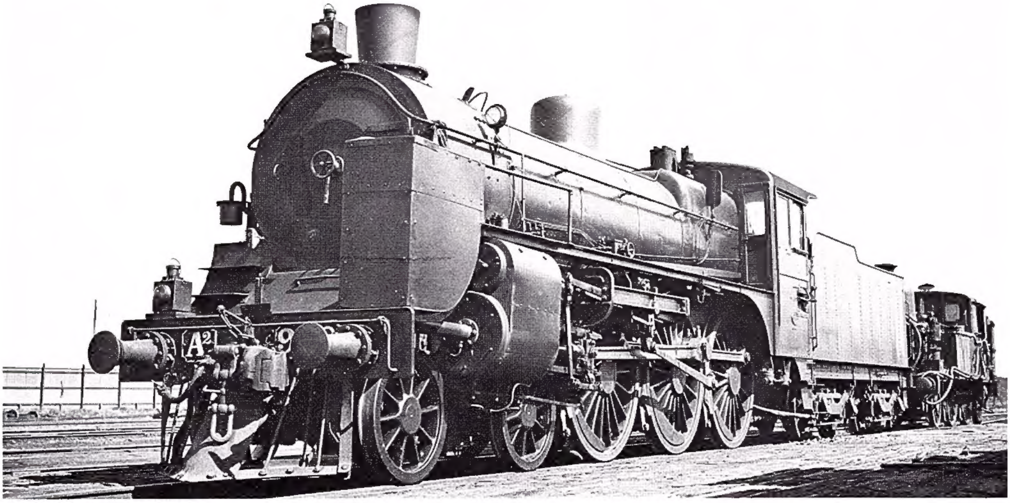
No.572 had one peculiarity by which it could always be distinguished from its classmates: this was its flat-topped dome cover with a noticeable reduction in diameter of the sides from crown to base. On completion of testing, five more A2s were ordered in 1908 and delivered by Newport by the end of the year, carrying Nos. 574, 576, 578, 580 and 722. Thereafter further batches were constructed at Newport and issued to traffic: four in 1909; eleven in 1910 and nineteen in 1911, all with even numbers, as was the practice until separate 'odds and evens' numbering of freight and passenger engines, respectively, which had persisted since 1860, was abandoned by 1912.

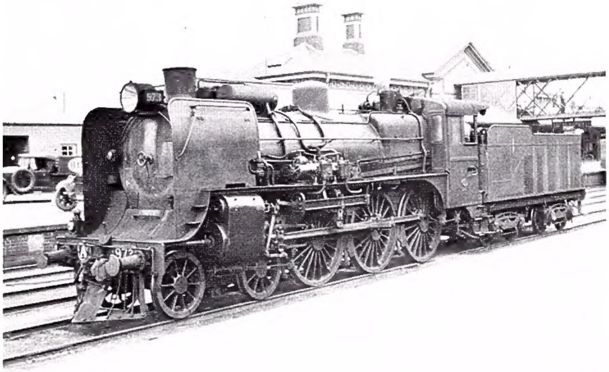
For the next two years vacant odd numbers in the former freight allocation were filled by current construction, thus A2s bearing consecutive original numbers bore different building dates. Fifteen more A2s were put into traffic in 1912 followed by five in 1913, which were the first VR passenger locomotives issued with odd numbers. In 1913 another 45 A2s were built with consecutive numbers, followed by 26 more in 1914 and then in 1915, thus completing a total of 125 built with Stephenson valve gear located between the frames in just over eight years.

980 equipped with Cardew track depression indicator gear at North Melbourne Loco. 1932. (VicRail)



DEVELOPMENTS OVER THE YEARS

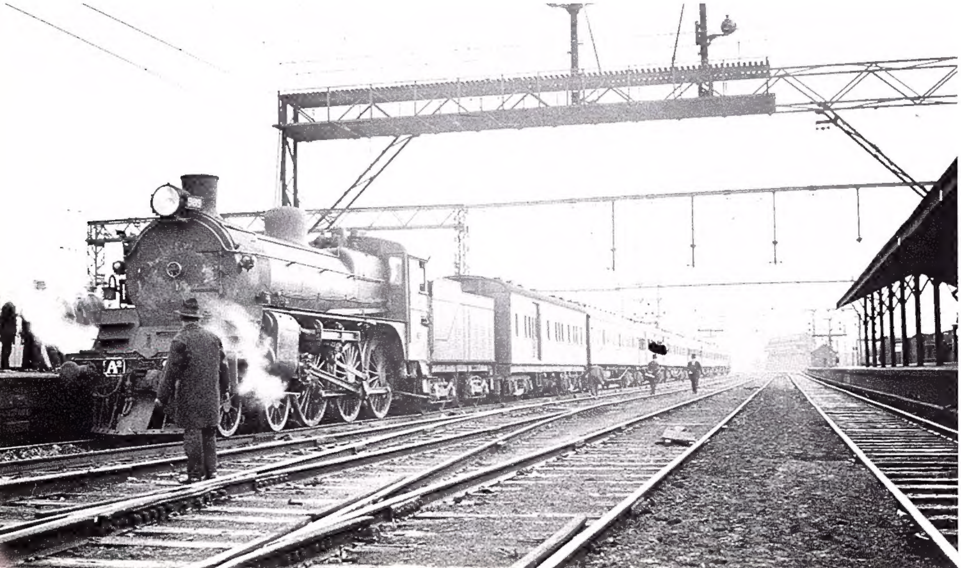


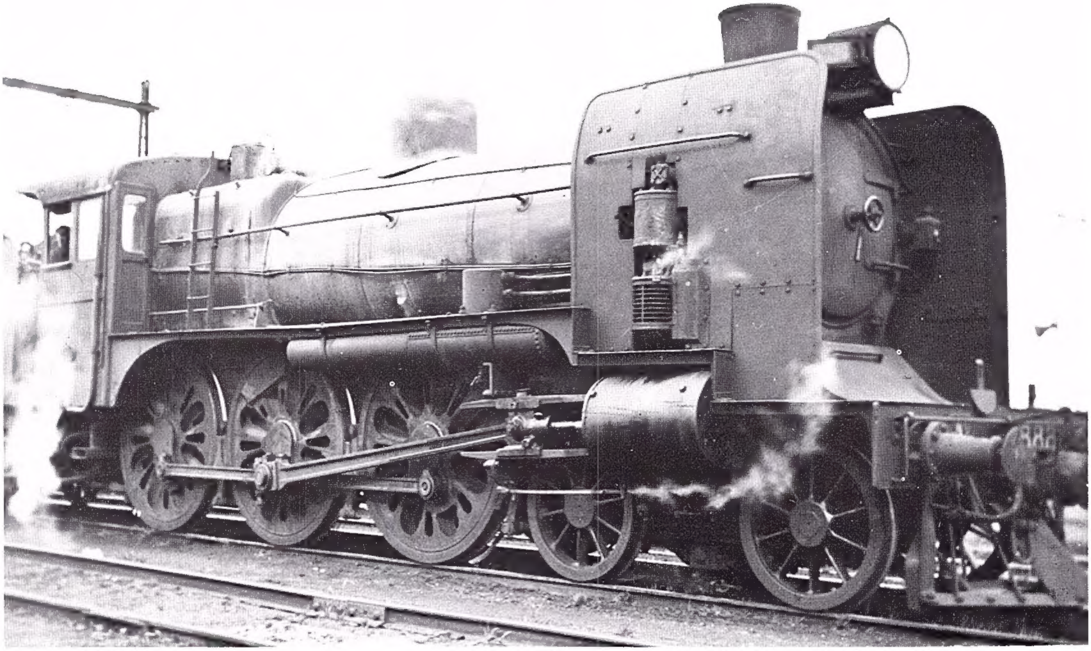


Above: 998 with indicator shelter and flanged funnel base for MFE test in April 1934 at North Melbourne Loco.

Left: 973 with ACF1 heater at Bendigo. June 1940.

Below: 989, the first with standard MFE at Spencer St after a 2 hour, 10 minute run from Bendigo under test with the dynamometer car. September 1934. (All photos John Buckland)

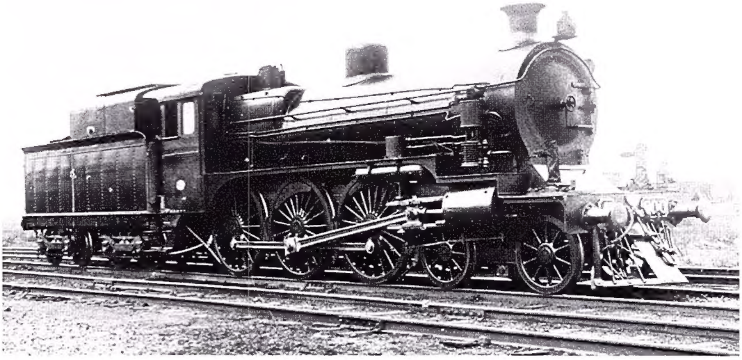


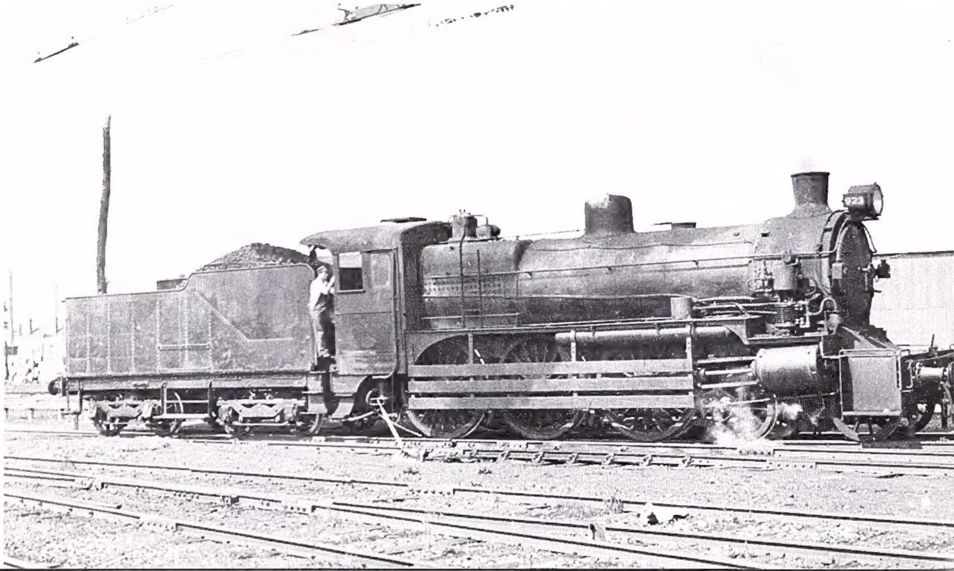


Above: 888 at North Melbourne on 8.8.52, a Stephenson coal burner with fabricated dirvers. (Late S C Whalley)

Right: 800 fitted with Fuller-Lehigh system pulverised coal apparatus during 1922-23. (Late L Poole)

Below: 923, stripped of its glory quietly shunts the Port Melbourne yard. 23.9.58. (John Buckland)





Superheater version developed

William Montgomery Shannon succeeded Woodroffe as CME in 1912 when A E Smith was promoted to Assistant CME in charge of departmental workshops and their equipment, with nothing directly to do with loco or rollingstock design. Under the direction of Shannon, the A2 design was further developed and modernised to include a superheater and with redesigned cylinders and valve chambers to incorporate inside admission valves operated by outside Walschaert valve gear. Unfortunately, opportunity was not taken to lengthen the 4⅝ inch valve travel originally provided by Siepen.

The first of the redesigned Walschaert series of A2s built at Newport and issued to traffic in October 1915 was No.983, which owing to wartime non-availability of superheater equipment from Britain, was commissioned with a 200 p.s.i. saturated steam boiler, as were 13 of the first 15 built between October 1915 and June 1916. As superheated boilers became available within the next two years they were changed over to the Walschaert engines, which had cylinders enlarged to 22″ diam.; the stroke remaining at 26″. The superheated boilers were identical in dimensions to the original, but the working pressure was reduced to 185 p.s.i. to give a tractive effort at 80% pressure of 25870 lb approximately the same as the Stephenson variety, which, of course had inside valve chambers with outside steam admission. This necessitated provision of new cylinders before their subsequent conversion to superheater engines.

To clear the value gear and outside steam chests, the footplates were extended forward to level with the front of the smokebox, then curved down to front headstock level. To this curved plate two pairs of steps were attached for access on either side. When subsequently the superheater boilers were available with a 15′ barrel carrying 136 x 2″ tubes and 24 x 5 5/16″ flue tubes, the total evaporative heating surface was 1716 sq.ft. with 156 sq.ft. in the firebox. Initially two types of superheaters were fitted: Robinson with 369 sq.ft. additional heating surface and Schmidt with 499 sq.ft. additonal. The copper inner firebox was retained with the same grate area. Subsequently an all steel A2 boiler was designed which with an MLS superheater and short return loop elements had a combined total heating surface of 2040 sq.ft. of which the firebox contributed 145 sq.ft. and the elements 331 sq.ft. This was interchangeable between Stephenson and Walschaert type A2s with the safety valves set accordingly.

Bogie and driving wheel sizes and wheelbase remained unaltered, but the weights were increased as follows:

	Stephenson	*Walschaert*
Front bogie	17.7 tons	20.2 tons
Coupled wheels	51.2 tons	52.15 tons
Total engine	68.9 tons	72.35 tons

The tenders remained the same and interchangeable, weighing 45.75 tons to give a total roadworthy weight of 114.65 tons (Stephenson) and 118.1 tons for the Walschaert version. While the original A2 tender carried 4460 gallons of water, the Walschaert series received self-trimming tenders carrying 4700 gallons and 6 tons of coal. Subsequently tenders were standardised and those with short underframes were replaced.

The 60 A2s comprising the Walschaert series were commissioned over seven years; seven in 1915, eight in 1916 after which there was a break of two years due to war-caused shortage of materials until 1918 when a further eight were completed. Then followed another seven in 1919; ten in 1920 and 14 in 1921, of which two each were erected at the new provincial workshops at Ballarat North and Bendigo North. The final batch of six constructed in 1922 were divided between the two provincial works, thus bringing the class total to 185 — the second largest individual class of locomotives on the VR.

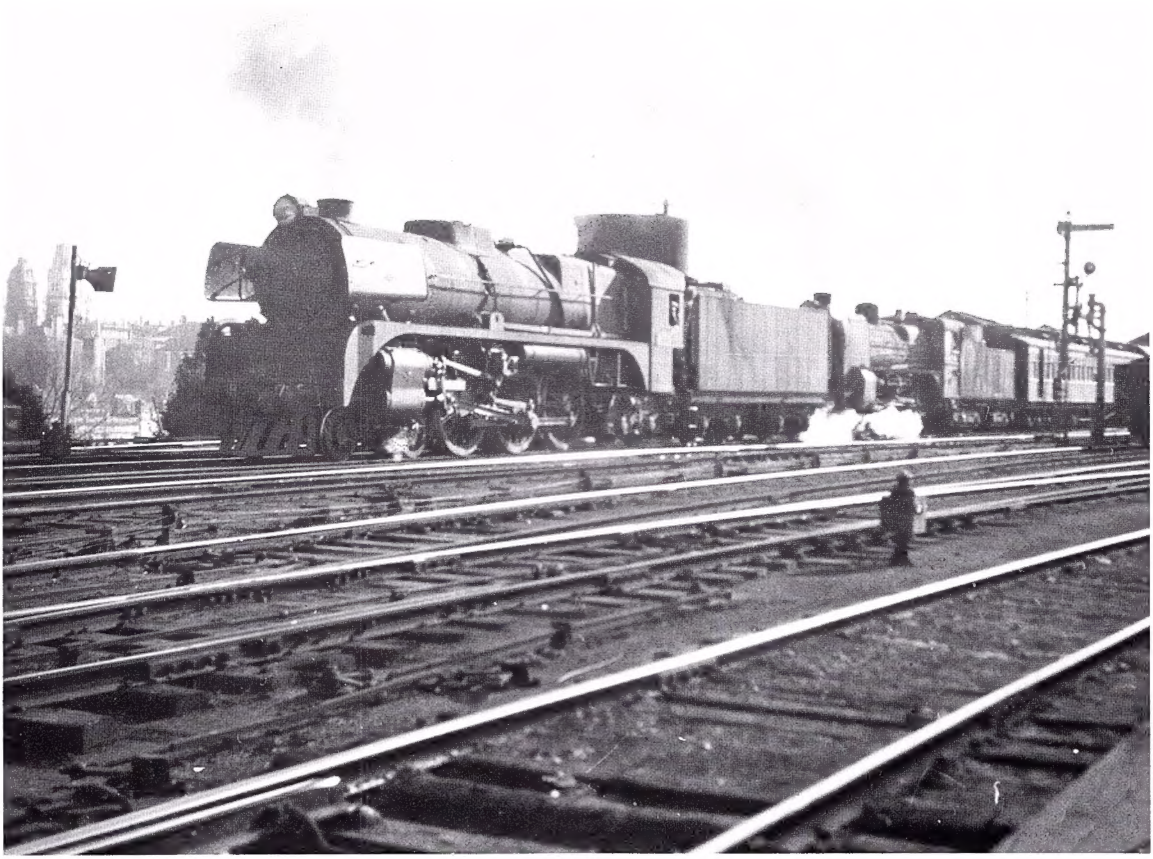
Re-numbering and re-classification

As already mentioned, conversion of saturated A2s to superheater was commenced first with the early Walschaert series and subsequently with the earlier Stephenson engines, which required replacement of cylinders and valve chambers. In order to separate and identify superheater from non-superheater versions, and to reduce the spread and rationalise the numbers, in 1923 the Commissioners authorised an engine renumbering program, which involved initially, renumbering some two-thirds of the A2 class, within the number group 800-999, with the 60 Walschaert series numbered 940-999.

The numbering was carried out somewhat haphazardly, but resulted in the remaining 90 saturated Stephenson engines being allocated Nos. 800-889 and the converted and Walschaert engines Nos. 890-999; there being 50 converted engines at the time. Subsequently in March 1929 in a scheme to visually distinguish non-superheater engines from their brethren, what could (and should) have been made simple and fool-proof and avoided further number juggling, resulted in a confusing proliferation of number-swapping which lasted until 1949, when the last A1 (non-superheater A2) was converted to superheater. To further confuse the issue, when the first A2 (878) was condemned in March 1941, the vacant number was later filled by a later conversion of the 70 engines which were classed (temporarily) as A1. The utter confusion which resulted for the best part of 20 years — 28 were reclassified and retained their numbers; 15 were reclassed and renumbered once; three were reclassed and renumbered twice; eight were reclassed and renumbered three times, while 16 were not reclassed before being converted, covering a total of 99 numbers issued to saturated engines between 1929 and 1949, when class A1 was eliminated.

Experiments and refinements

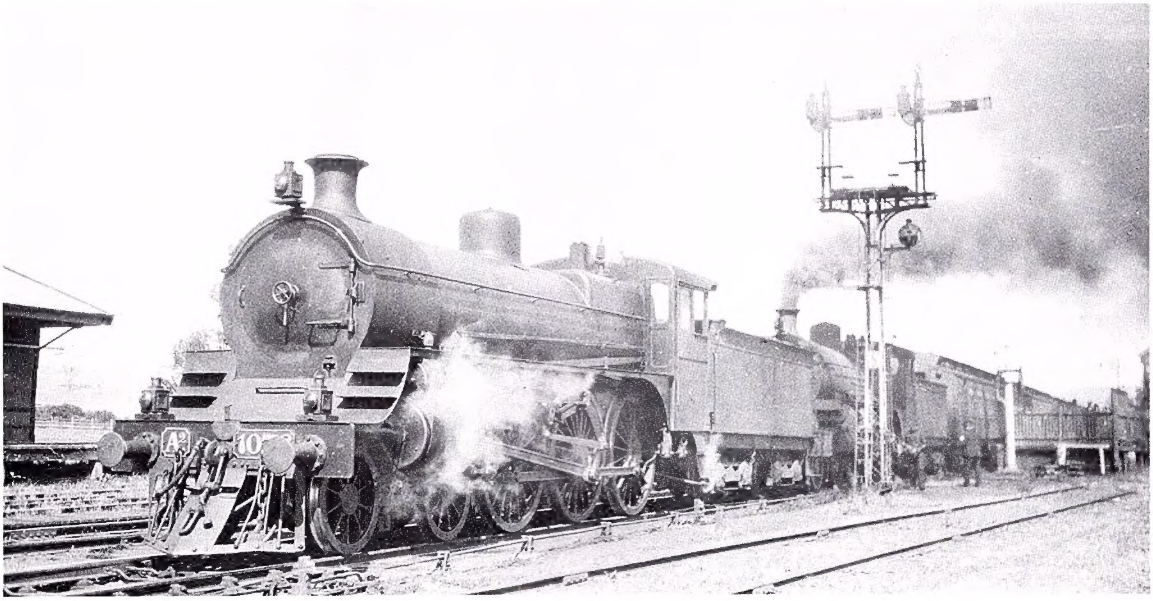
Since the A2 was one of Victoria's most ubiquitous locomotives for so many years, naturally they were the subject of numerous modifications and trials designed to improve operation, reduce maintenance requirements, economise on fuel and water consumption, improve lubrication and increase their haulage capacity. Apart from conversion to superheater, modifcations made to individual and groups of engines included: provision of mechanical lubricators; exhaust steam injectors, ACFI feed water heater (on 973), Rosebud grates, solid bushed big ends and hard grease lubrication, fitting Flaman speed indicators and recorders, loco pattern dual MCB automatic couplers and transition screw couplings to engines and tenders, fitting Pyle National or Stone turbo-generators, electric head, marker, cab and tender back-up lights, flanged



THE OVERLAND

Above: R709 and A2 954 depart Ballarat at approximately 16 00 with the *Overland* on 8.9.51. (Late W Jack)

Below: 1076 and 1008 rest at Bacchus Marsh with the Up *Adelaide Express* in 1922. (Late J C M Rolland)



smokebox doors, all-steel boilers, tender scale-bouy and continuous blow-down (875), Cardew track depression indicator gear (980 and later on 951), modified front ends, smoke lifters, oil-burners (all Walschaert series except 956, 970, 975 and 998), one trick-ported valve (963) and finally conversion to heavy-duty shunting service (826, 827, 834, 876, 894 and 923). Of the remainder of the Walschaert engines retained in service towards the end, five (944, 948, 964, 986 and 992) were requipped with Boxpok pattern cast steel driving wheel centres, while 888 acquired a set of welded fabricated driving wheels, but was thereafter restricted to freight working only.

The original A2, 800, was used for some of the lengthy tests of the American Fuller-Lehigh pulverised black coal-burning experiments in 1922-23 and certainly the most famous 'guinea pig' was No.998 used for the lengthy series of trials to determine the correct proportions for application of Wagner ratios for front end modification from April 1934, which resulted in the Modifed Front End ('Basher') engines which enabled reduced schedules and increased loads prior to the outbreak of World War 2. No.989 was the first to appear with the standard modified front end and No.993 with smoke-lifters soon afterwards.

Oil-burning adopted

At the outbreak of World War 2 the VR was still almost wholly dependent on the already ageing A2s for the bulk of main line passenger and much of the lighter and faster freight haulage. Although various tentative diagrams for a medium weight or light Pacific locomotive were evolved between 1925 and 1935, none had been authorised for construction (apart from the four S class three-cylinder heavy Pacifics built 1928-30) as locomotive construction on VR was suspended from 1931 to 1937 because of the great 'depression'. So again it became the task of the A2 — much improved and modified — to keep the wheels turning under increasingly difficult conditions of maintenance, poor fuel and frequent overloading.

By 1945 the majority required either immediate replacement or at least major overhaul. Chronic shortage of coal suitable for locomotive purposes, labour shortages and difficulty in recruiting trainee enginemen, plus the availability of almost unlimited supplies of oil-fuel at a competitive price resulted in the Commissioners' decision to convert engines to oil-burners. In November 1945, No.942 was equipped with a steam atomiser type of oil-burner supplied from a rectangular 1400 gallon tank located in the coal space in the tender. After a brief testing period a standard burner arrangement was designed for conversion of A2 fireboxes to burn oil with minimum delay and cost, which would permit their re-conversion to coal-burners if required.

Initially 56 of the Walschaert series A2s, most of which had steel fireboxes, were converted — barely sufficient to ensure continuation of minimum essential services, to be followed by similar conversions of C class 2-8-0s and later some N class 2-8-2s. When oil-burning appeared to be a permanent feature of continued steam operation, the equipment was modified to burn cheaper heavy residual oil (Bunker C) which required fitting a steam heating coil in the supply tank to make it flow freely to the burner. Later to facilitate draining and cleaning residue from the supply tanks, a new design of cylindrical oil tank of 1500 gallons capacity was substituted for the original rectangular tanks. These were later fitted to some C class and all subsequent N class oil-burner conversions. The reliable performance and generally superior steam-raising capacity of oil-burning boilers far outweighted any temporary increase in fuel cost when compared with the totally inadequate and often inferior coal supply available in immediate post-war years. Engine availability and reliability was improved by elimination of lengthy stops for engine requirements — breaking up accumulations of clinker in fireboxes and dumping ashes at terminals and en route, thus reducing traffic delays.

The success of this innovation was such as to give a new lease of life to VR's most famous locomotives, which by 1949 were beginning to go to the scrap heap in earnest. First was No.878 (originally 863) withdrawn in March 1946 with something over one million miles run in 33 years, soon followed by Nos. 916 and 970 five months later and the test-horse No.998, condemned in September 1946 was cut up a year later. The test was not so much age, or total mileage run, but the possibility or otherwise of economically repairng much-patched frame plates, damaged cylinder and cradle frame castings, frame stays, etc., or repairing collission damage resulting from such accidents as those at Serviceton (September 1951), Moriac and Tynong (1952). Providing new frames for engines overdue for replacement was considered uneconomic, although some ten A2s were re-framed between 1940 and 1942.

Withdrawal from service and condemnation/scrapping continued apace: four in 1946; two in 1947; four in 1950; 12 in 1952 and no less than 52 in 1953 and 36 in 1954, reflecting the impact of the newly-arrived R class 4-6-4s, which themselves were supplanted almost immediately by the B class diesel-electrics from 1952. Withdrawals continued until in September 1957, only 31 A2s remained on the register — 17 Stephensons and 14 Walschaets, and of these nearly half were held in storage 'pending' at depots and workshops.

Later developments

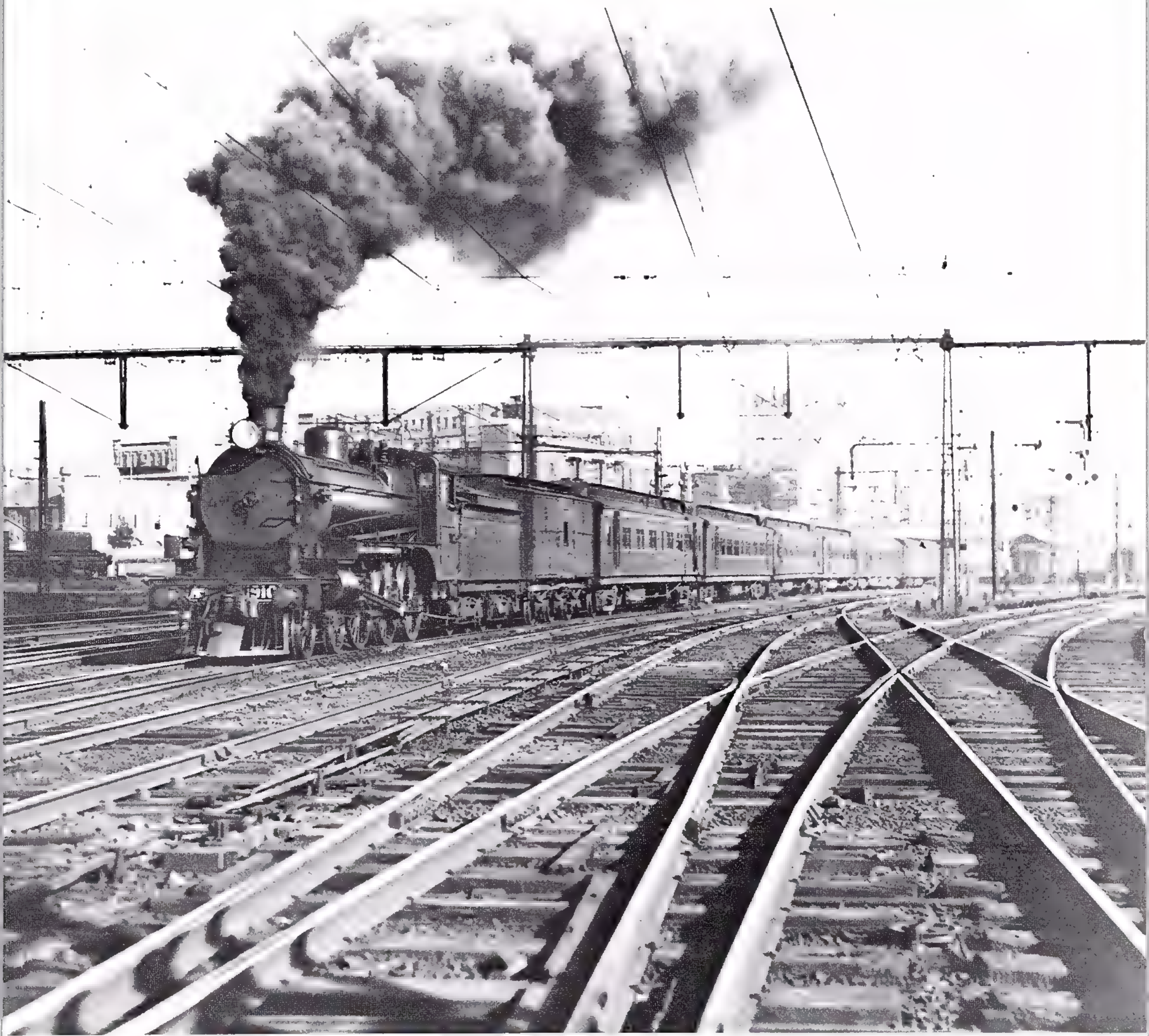
One of the final developments in the long history of modifications and improvements to the A2 as Victoria's principal main line passenger locomotive was the fitting of cast steel Boxpok driving wheel centres to five of the remaining Walschaert series in 1947-48. This gave them a somewhat rakish look with their new standard ACN high-sided welded tenders and cylindrical oil fuel tanks with service ladders. In common with most then remaining VR steam power, to reduce boiler maintenance and increase mileage between washouts, integral water treatment units were fitted to tenders together with a blow-down valve operated manually from the cab. The outlet pipe discharged into a centrifugal separator under the cab, with steam exhaust piped up the front of the cab. The chemically treated feed water formed a sludge in the boiler firebox water legs which was easily discharged by regular blowing down, as was the practice in South Australia, often whilst running.

Certainly the last of the many physical appearance changes which marked the life span of these remarkable locomotives (and the crowning indignity for a former express passenger locomotive) was the conversion in 1954 of six of the remaining Stephenson A2s to heavy duty shunting and transfer engines for use as 'yard pilots' in Melbourne.

Most regrettable was the scrapping in September 1954 of the former pattern A2 No.572 (as A2 825) almost coinciding with the Centenary of Railways celebrations, which also marked the sudden withdrawal and scrapping of the four almost equally famous S class Pacifics, which had been displaced from working the *Spirit of Progress* by diesel-electrics. This was such a regrettable action that eventually it inspired moves which resulted in establishment of the Railway Museum at Newport, where they are now preserved for posterity what could be saved from the scrapheap such relics of the great days when 'steam was king' and the king of steam on the Victorian Railways was the well-tried, versatile and always dependable A2 locomotive.

Footnote: It is a matter of history now that all of the 185 A2 locos (and also the 263 DDs for that matter) entered traffic without cab side number plates and anonymous from side on. According to the late Leslie G Poole, there appeared in *The Locomotive* magazine, vol. xxxi for July 15, 1916 page 124, a picture captioned A2 No.134! But this number was never carried by No.991 (the 134th engine in the class), which went into traffic as No.991 on 30.1.1916. The explanation is that the VR Commissioners decided in 1916 that each loco class should have its own series of numbers commencing at No.1 The only A2 to be officially thus identified never entered traffic so adorned, as the Commissioners cancelled the ordering of new number plates probably on account of the cost. Therefore this engine entered traffic as No.991 which it retained to the end of its life in 1953. It was, incidentally the 326th product of Newport Workshops.

910 heads for the main line with the Down *Albury Express* as it leaves Spencer St in 1934. (John Buckland)



Some A2 Runs, 50 Years Ago

R L ABBOTT

Further old records of VR tests in the 1929-1936 period have come to hand, covering some of the work leading up to the 'Modified Front End' (MFE) designed by Mr Edgar Brownbill, later the VR Chairman of Commissioners. This development, improving the drafting of VR locos was based on work done by Dr Wagner of the German State Railways on tube and flue proportions; and the fitment of a self cleaning smoke box from American Railroad Association work originally researched by Dr W F M Goss at Peerdue University. At very low cost, it transformed the performance of the then current VR engines A2, C, X, S, K, N, D3 from a rather average pre-1925 standard, to 1930s international standards.

In May 1933, A2 974 did some steaming trials to Bendigo and Seymour with 1½″ diameter superheater tubes based on Dr Wagner's ratios. He stated that there should be a definite relationship between the superheater flue diameters, the element diameters and those of the fire tubes, to make the velocity of the hot gases from the firebox the same in each.

The runs recorded were made on regular passenger trains, the Down 12.55 pm to Bendigo, returning as the Up 6.50 pm, both trains stopping at all stations, on 10.5.33; and the 4.00 pm Albury express to Seymour, on 16.5.33.

Superheated steam temperature was recorded, also the number of shovels full of coal fired (Maitland — good average quality) at 9 lbs of coal per scoopfull average. The Bendigo run was observed by Mr L R Haxby and the Seymour trip by Mr F C Urhan — both engineering assistants from the VR Drawing Office. During World War 2, Mr Haxby was seconded to the Army Design DO in Burke Rd, Gardiner, as Chief Design Draughtsman.

Charts 1 (Bendigo) and 2 (Seymour) taken directly from the report summarise the results. Dr Kelly and Fr Fitzgerald are not Doctor and Father respectively, but driver and fireman, the VR was never in the business of saving body and soul!

Quoting from the Bendigo report runs on 10.5.33 —

> "the engine steamed well and maintained a high boiler pressure and water level for the whole of the trip. At no time did the boiler show any signs of being unable to supply steam to maintain the required horsepower.
>
> The engine also pulled very well and was able to negotiate the (1-in-56) bank between Riddell and Gisborne with a 9″ cut off and speed of 23 mph, where usually this bank requires anything from 10″ to 12″ cut off. Also, in negotiating the (1-in-52) Macedon bank with a 12″ cut off at a speed of 23 mph, it was only necessary to put on 5 fires from Macedon platform, equal to 28 shovels or about 2½ cwt of coal. (4 miles to crest of the Divide at 1902 ft.)
>
> On negotiating the (1-in-50) Chewton bank, the engine maintained a steady speed of 24 mph, with a cut off between 10″ to 12″, giving a superheat of 665°F. The maximum superheat, 670°F, was obtained between Taradale and Malmsbury at a speed of 30 mph and cut off 9″.

A2 974 had the original front end, before the development of the MFE, with a 5½″ diameter 'high' blast pipe, two horizontal spark arrestor grids, and the much 'loved', but inefficient, 18½″ curvacious classic funnel. After MFE, the blast orifice was lowered and opened to 6″ diameter, the ARA self cleaning smokebox plates and screens installed and the 23″ diameter taper funnel was fitted. In later tests, the combination of all changes increased the max. Drawbar h.p. at 24 mph from 850 to 1190, an increase of 40%.

In these 1933 tests, superheated steam with the Wagner ratio 1½″ elements averaged from 626 to 660°F, with a maximum of 685°F. For the period, this was very good, and far ahead of the early S class tests in 1928 at 560°F, covered *Newsrail* for March 1982.

Some rail horsepowers can be calculated from the weight of the train and the speeds up the steep grades on the Bendigo line. In the figures tabulated below, 10 tons has been taken off the VR nominal car tons rating (assumes a full car load), and 8 tons off the maximum engine weight ex North Melbourne loco, to allow for water and coal used. This gives a gross train weight of 225 + 110 = 335 tons of 2240 lbs. Rolling resistance is estimated on RR lbs/ton = $5 + .003V^2$ (V = mph).

Location	*Grade*	*Speed*	*Cut off*	*TE*	*RHP*
Riddell-Gisborne	56	23	9	15,600	960
Macedon Bank	52	23	12	16,600	1020
Chewton Bank	50	24	12	17,200	1100

The Chewton bank figures are exceptional — a steeper grade 1 mph faster for the same 12″ CO — I hope Dr Kelly did not cheat while Dick Haxby was not looking and wind the CO out to 13″ (50%)!

Maybe the top up of coal from Bendigo loco was of better quality than North Melbourne — with more BTUs; Maitland coal could vary from around 13,000 BTU/lb up to 13,800.

The average of these three runs at 1026 RHP is good for a pre MFE engine, and allowing on estimated 70 RHP to move the engine at 24 mph, the DBHP would be 1026 - 70 = 956. This is 12% above the 850 DBHP shown on figure 15 of Mr Brownbill's thesis for his M.Mech E, a couple of years later. In the later life of A2s, oil fired MFE jobs had a normal maximum RHP of around 1200 RHP, an increase of 17% on these special tests, so maybe the crew was really doing their best, with a well maintained engine, on pretty good coal, to impress the CME!

The run to Seymour in 91¾ minutes for an 8 car train of 325 VR tons is very close to the historical *Spirit of Progress* schedule of 88 minutes — often 90 minutes in actual practice. With the speed up of VR timetables in October 1981, Seymour is 79 minutes for 61½ miles, behind a B class diesel of 1200 to 1300 RHP, with generally a lighter load of 5/6 cars, 270 tonnes.

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CHAMPION ROAD, NORTH WILLIAMSTOWN

CHART 1 — ENGINE 974 "A2" WALSCHAERT

Superheater Elements — 1½" dia. — To Wagner Ratio — M.L.S. Header.
Standard Blast Pipe and Cap. 5½" dia. — Double Arresters and Cone.
Boiler Pressure 185 lbs/sq. inch — 22" dia. Cylinders.
Summary of (1) "Down" and (1) "Up" Trip taken on 10th May, 1983. Train — 12.55 pm "Down" (Bendigo) — 6.50 pm "Up"

Melbourne to Bendigo

			MAXIMUM				**AVERAGE**						
Date	**Train**	**Load**	**Boiler Pressure**	**Cut-off Steaming**	**Super-heat Steaming**	**Speed Steaming**	**Boiler Pressure**	**Cut-off Steaming**	**Super-heat Steaming**	**Speed Steaming**	**Coal Fired from Platform**	**Weather**	**Remarks**
10.5.33	12.55 pm Bendigo	235 Tons (6 Vehicles)	187 lbs/ sq inch	12"	660°F	57 mph	181 lbs/ sq inch	6.7"	627°F	34.4 mph	538 shovels (About 43 Cwt.) 8.9 lbs/shovel	Fine and Calm	Dr M Kelly Fr J Fitzgerald
Melbourne to Woodend (only)													
10.5.33	12.55 pm Bendigo	235 Tons (6 Vehicles)	187 lbs/ sq inch	12"	660°F	45 mph	182 lbs/ sq inch	6.9"	635°F	32.4 mph	342 shovels (About 27½ Cwt.) 8.5 lbs/ shovel	Fine and Calm	Dr M Kelly Fr J Fitzgerald
Bendigo to Woodend													
10.5.33	6.50 pm Ex. Bendigo	245 Tons (6 Vehicles)	187 lbs/ sq inch	12"	670°F	50 mph	183 lbs/ sq inch	8"	626°F	32.1 mph	332 shovels (About 27 Cwt.) 9.1 lbs/shovel	Fine and Calm	Dr M Kelly Fr J Fitzgerald

Remarks: Maitland coal, Good average quality.

R.S.33/2313
LRH'MF

Drawing Office, Melbourne
18th May, 1933

CHART 2 — "A2" ENGINE 974

Test of Steaming and of Superheater Elements
Melbourne — Seymour

Summary of Guage Readings:

			MAXIMUM				**AVERAGE**						
Date	**Train**	**Load**	**Boiler Pressure**	**Cut-off Steaming**	**Super-heat Steaming**	**Speed Steaming**	**Boiler Pressure**	**Cut-off Steaming**	**Super-heat Steaming**	**Speed Steaming**	**Coal Fired from Platform**	**Weather**	**Remarks**
16.5.33	4.00 pm Seymour	325 Tons (8 Vehicles)	187 lbs/ sq inch	12"	685°F	59 mph	184.8 lbs/ sq inch	8"	660°F	40.3 mph	227 shovels (About 23 Cwt.) 9.2 lbs/shovel	Fine and Calm	Dr Knight Fr Chant

Coal used: Maitland, good average quality.
Train arrived at Seymour 5.33 pm. (Schedule time 5.35 pm excluding stop at Kilmore East).

A summary of running times per section is as follows:

	RUNNING TIMES		
Section	**Schedule (330 Tons)**	**Actual (325 Tons)**	**Remarks**
Spencer Street	—	—	Checked at Essendon (Line Repairs)
Donnybrook	40	38	
Wallan	15	12	
Heathcote Junction	6	5½	
Kilmore East	7*	7¾	Stopped at Kilmore East
Broadford	8*	9¼	
Tallarook	10	10¾	
Goulburn Junction	5)	8½	
Seymour	4)		
TOTAL	**95**	**91¾**	

* = 1 minute extra allowed when stopping at Kilmore East.

Do you find you have nothing to do on Tuesday nights?

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General News

Refreshments on intrastate services: Below is a list of trains on which refreshment services are currently provided:

Monday to Friday

Down		*Up*	
07 50	Bendigo (Mon.)	04 50	Bendigo (Mon.)
07 55	Horsham	06 10	Albury
07 55	Albury	06 25	Numurkah
08 26	Bairnsdale	06 40	Swan Hill
08 35	Warrnambool	06 45	Bendigo
09 50	Bendigo	06 45	Warrnambool
12 15	Albury	06 45	Dimboola
12 55	Warrnambool	07 00	Sale
13 45	Bendigo	11 00	Bendigo
17 20	Albury	12 35	Albury
17 40	Swan Hill	12 45	Warrnambool
17 55	Dimboola	13 25	Bairnsdale
18 00	Warrnambool	14 05	Horsham
18 02	Numurkah	16 25	Albury
18 26	Sale (Mon. to Thurs)	17 00	Bendigo
18 26	Bairnsdale (Fri.)	17 45	Warrnambool
18 20	Bendigo	21 25	Mildura
19 40	Albury (Fri.)		
21 20	Mildura		

Saturday

Down		*Up*	
07 55	Horsham	06 00	Bairnsdale
07 55	Albury	06 40	Swan Hill
08 26	Bairnsdale	06 45	Warrnambool
08 35	Warrnambool	06 45	Albury
13 45	Bendigo	06 45	Dimboola
17 55	Albury	07 00	Numurkah
18 00	Dimboola	12 45	Warrnambool
18 05	Swan Hill	13 25	Bairnsdale
18 15	Numurkah	14 05	Horsham
18 25	Warrnambool	16 40	Albury
18 26	Sale	17 00	Bendigo

Sunday

Down		*Up*	
09 30	Bairnsdale	07 00	Albury
09 30	Horsham	15 15	Albury
09 35	Swan Hill	16 10	Horsham
09 45	Albury	16 30	Bairnsdale
09 45	Numurkah	16 35	Swan Hill
18 05	Albury	16 55	Albury
18 55	Warrnambool	17 00	Bendigo
19 45	Bendigo	17 00	Warrnambool
21 20	Mildura	17 00	Numurkah
		21 25	Mildura

(KW)

Holiday sightings: In the course of his school holiday ramblings, a reader was delighted to see some of the very interesting passenger consists that fortunately can still be observed around the system, made the more so with the gradual introduction of the V/Line logo on locos and carriages.

22.8: Warrnambool, 12 00 pass. — B79, VBPY66, 16BN, 37BRN, 39ACN.

23.8: Camperdown, 07 32 Up pass. — B84 (V/Line), CD7 (SAR livery), 14AS (blue), 1BRS (orange), 3BS (orange), 20BE (red).

25.8: Castlemaine, 09 28 Up pass. — X42, 33CE (orange), 4AZ (blue), 3BRS (orange), 1BZ (orange), 8BS (blue); 09 34 Down pass. — B61/T404, 14BN, 41BRN, 42ACN, VBPY92; Bendigo: 15 55 Down pass. — X43, 7BS (V/Line), 2BZ (orange), 1MBS (blue), 7AZ (V/Line), 9CE (blue), VLPY110.

27.8: Camperdown, 07 32 Up pass. — X40, CD7, 14AS, 1BRS, 3BS, 20BE, 30ACN, 29BRN, 28BN (train strike the previous day); 11 03 Down pass. — B84/X47 (both V/Line), 19BN, 20BRN, 21ACN, ALPY 7.

28.8.83: Camperdown, 17 51 Up pass. — B79/B81, 45ACN, 43BRN, 10BN, 33ACN, 31BRN, 25BN. (APB)

Locals want rail service improved: The Transport Minister, Mr Crabb, will be told existing rail services in the Loddon - Campaspe Region should be maintained and improved. This part of a submission being sent to Mr Crabb by the Loddon - Campaspe Regional Planning Authority. The submission was prepared by a transport sub-committee and adopted at the authority's August meeting. It suggests the Melbourne - Bendigo line should be upgraded for a capacity of 120 km/h and the need for a dining car should be investigated. (FS)

New superphosphate delivery system: The State Transport Authority plans a regional superphosphate delivery system, according to Mr Bill McGrath (MLA, Lowan). Mr McGrath said the authority planned to reorganise superphosphate delivery to farmers. The authority aimed to develop the system around 102 superphosphate rail delivery points. Each delivery point would need facilities to handle five railway wagons of fertiliser at a time.

"If farmers wish to have their superphosphate delivered outside the delivery point system, they will have to pay a significant freight charge", Mr McGrath said. Plans for the new-look rail delivery system emerged at a transport seminar called by Mr McGrath at Longerenong Agricultural College, near Horsham. Seventy-five people attended. *(News)*

Central grain plan opposed: The State Government's proposed centralisation of grain receivals in Victoria will be commercially disastrous, according to Mr Donald McGauchie, a member of the Grains Council of the Victorian Farmers' and Graziers' Association. Mr McGauchie of Prairie said he believed he was speaking for all grain growers in the areas around Bendigo. He said grain producers had initially been led to believe there would be substantial cost savings in the new plan to create central receival points. He said it had been demonstrated that this was not so.

Association members were concerned that the railway's grain handling ability had been allowed to deteriorate over the last two years, he said. As an example he said that over the last two years 15 fewer locomotives were available to shift the harvest. In 1981-82 the railways handled a harvest of four million tonnes. Present indications were that this harvest would be less, but, Mr McGauchie said, it was "pretty certain" the railways would be unable to handle it. He believed the Government had increased freight charges above any commercially justifiable level. (FS, PM)

Koondrook — "Life after death": Removal of rails by a salvage contractor on the closed former Kerang & Koondrook Tramway had reached half way by the end of September. Work commenced at the Koondrook end using mechanised rail mounted equipment obtained from the STA Adelaide. The original builders of the tramway in 1889, the Shire of Kerang has purchased a section intact in the formation of a Y leading from the National Trust Classified ornate Koondrook passenger station in the main street to the timber mill thence back along the banks of the Murray River between the former wharf and the administration and goods building. The goods shed was sold to Mr G Molin who uses it for storage purposes in association with his nearby service station. During its 94 years existence the section from Kerang to Pyramid Creek has been the only means of access to fight floods threatening the junction station township. Life once again briefly returned to the doomed line on Thursday, 15th September during a new flood emergency when the local rail tractor hauled volunteers and sand bags in open wagons out along the overgrown flimsy 50 lb rails to once again save Kerang. When the rails are removed the only access will be by hardly an efficient facility capable of moving hundreds of people and thousands of sand bags in a sudden emergency — a day authorities may live to regret. (POT)

Country show traffic: With most carriages fully committed to ordinary traffic it is not easy to run extra trains on weekdays, and there were few extra country trains for show traffic. Extra sets were found to provide double-consists on some trains, but there were many instances of InterCity trains being fully booked days in advance. Some of the moves made were:

On each day of the show period an extra empty cars departed Spencer St at 08 10 for Geelong, forming an 09 25 extra service to Melbourne. This train was formed by the 07 47 arrival Werribee. On Mon.19.9 the Down train was T413-70BPL-2BW-35AW-1BCE.

On both Saturdays the 06 45 Up and 17 55 Down Albury trains were double consist, using the N set which is normally off at Wodonga all day Saturday.

On Mon.19.9 the 06 45 Up and 18 00 Down Warrnambool were double consist, the second set being an N set.

On Sat.17.9 an additional train departed Spencer St for Traralgon at 17 07. It used one of the sets with AS and BE.

The 18 30 Down Bendigo on Sat.17.9 was double consist, with the usual *Vinelander* set plus 15BE-33BE-60BES-8AS-14CW.

For group travel from the Woodend/Daylesford area on Mon.19.9 the 06 45 Up Bendigo was double consist (N set plus the same set as on Saturday night) and the 17 05 Down Kyneton was also double consist (N set plus 38BW-31BW-13AE-15CE).

The 09 22 arrival Traralgon on Mon.19.9 had two N sets. (SRMcL)

Efficient shunting at Spencer St: One aim of the change to operation of country trains in fixed sets of carriages was to eliminate time-consuming shunting of cars at Spencer St. However operations there are now so efficiently carried out that shunting moves are possible even in peak periods.

On Thurs.15.9 the 15 20 Up Seymour arrived in platform 6 at Spencer St at 17 04 to form the 17 30 back to Seymour. The load on arrival was T407-5CW-3BE-23BE-59BES, with no first class car. Newly painted Y146 quickly pulled the cars out of the platform, attached them to car 1AS which was standing in the next track, and pushed the cars back onto the van in the platform. It then removed 59BES, leaving a three-car train with the first class car in the correct position next to the van. X34-T397 dropped on for the Down train which left on time.

On Mon.19.9 the 07 17 arrival Bendigo had two VLPY vans next to the loco. The train engine shunted the leading van into the run-round road between platforms 4 and 5, where it was picked up by train engine B75 and attached to the front of the N set forming the 07 55 Horsham in platform 5. It was loaded with parcels, and the Horsham train left on time. (SRMcL)

Trinity College special: On Saturday, 8th October, 1983, the second Trinity Theological College Pilgrimage was run by special train to Wangaratta and return. Although a departure from Spencer St was a few minutes after the 8 10 time intended, T386 (in new V/Line colours) took charge of cars 70BPL, 1BE, 75BW, 5BCE, 71BW, 73BPL, 54BPL, 38BCE, 16BE and 9CW. Unfortunately, the train was obviously underpowered and another T class (T359) was attached as lead locomotive at Seymour. The train departed Seymour 27 minutes late, and although express to Wangaratta, the destination was reached 19 minutes late, at 12 noon.

The train was met by the Wangaratta City Band, who led our pilgrims — numbering about 500 — to the Anglican Cathedral for a service, which was followed by luncheon on the Cathedral lawns.

At Wangaratta the locomotives were run around the train, with T386 the lead locomotive. The train was cleaned and watered by SM John Le Roy and his staff — to whom we are indebted for the helpful way in which they entered the spirit of the occasion.

Following afternoon tea and another service, the pilgrims made their way back to the station for the return journey. Intended departure was 16 25 but this time due to the late return of the pilgrims the train left at 16 35. Arrival time at Melbourne was scheduled at 19 43.

Considering such train trips are good avenues for some PR work by our Transport Authority, it is a pity that adequate motive power had not been provided from the outset. A journey of nearly 4 hours from Melbourne to Wangaratta — even if a special train — is not the way to encourage rail use. This lack was at least offset by the friendly and helpful crew and the staff at Wangaratta station. (RJ)

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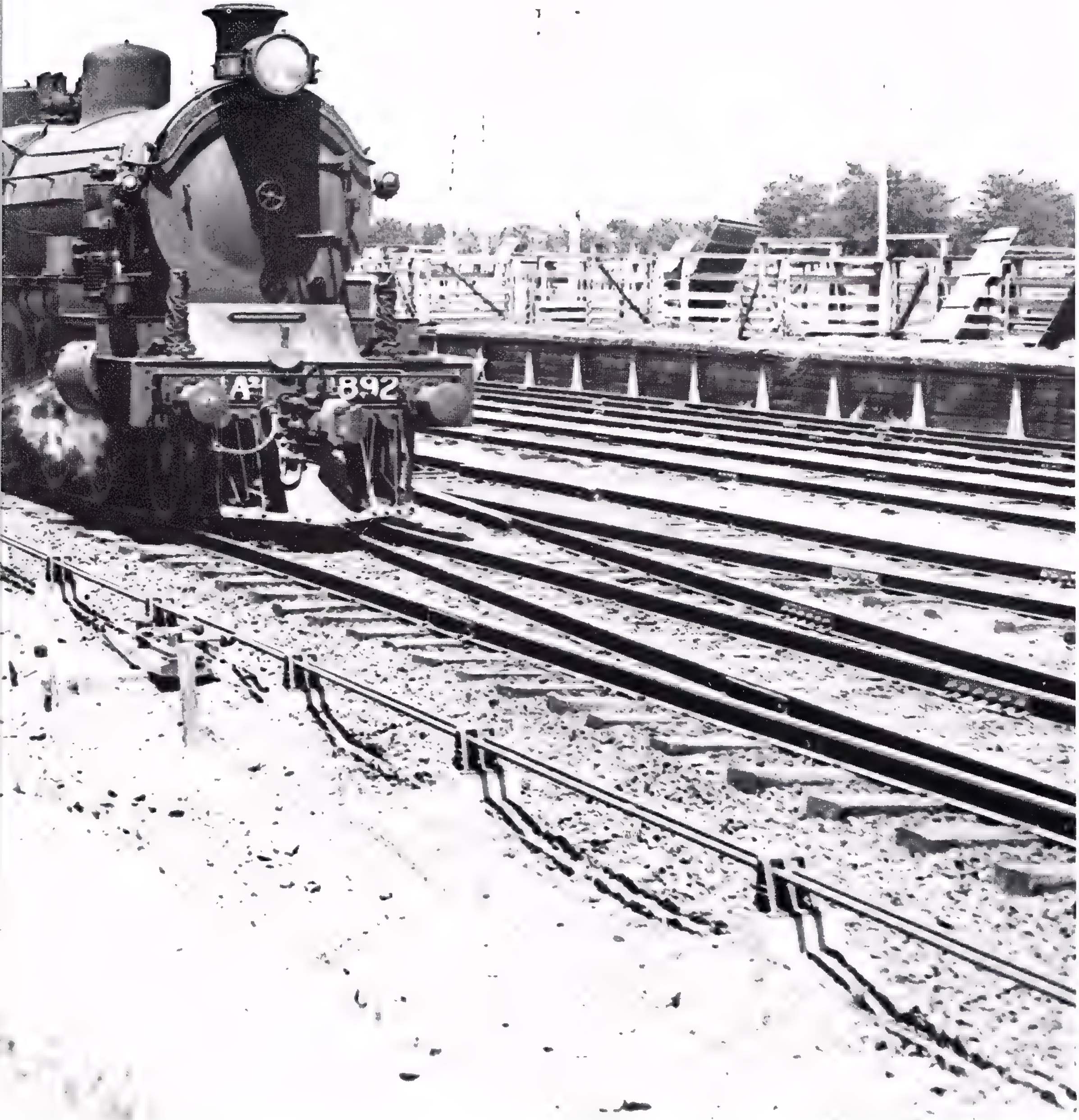
892 departs south out of Wodonga with a rake of stock trucks in December 1934. (John Buckland)



Traffic

WARRNAMBOOL LINE & BRANCHES

SAR brakevan on Warrnambool train: SAR brakevan CD7 had joined CD1, 2 and 3 in Melbourne and is running on the Warrnambool set. This set has remained unchanged for some time as CD7, 14AS, 1BRS, 3BS and BE. (WJ)

Geelong line: A reader has supplied *Newsrail* with some random observations of the Geelong line:

Wed.14.9: 18 30 Up — B63, 4BCE, 2AZ, Buffet car *Moorabool,* 1BS, 4BE; 22 30 Down — X?, 21ACN, 20BRN, 19BN, 15ACN, 40BRN, 13BN.

Fri.16.9: S312, T360, 20ZF, 18 VHQY, 42ZF at Pioneer Ashphalt, North Shore; 6 20 Up — B70, 39ACN, 37BRN, 16BN; T376, 28BW, 75BPL, 91BPL, 6BCPL and 33MT at Werribee; 19 10 Down — B83, 24ACN, 34ACN, 22BN.

Sat.17.9: 6 30 Up — B83, 4BCE, 2AZ, *Moorabool,* 1BS, 4BE; 18 25 Down — X31, 24ACN, 34BRN, 22BN, 27ACN, 32BRN, 26BN to Warrnambool.

Sun.18.9: 16 00 Up — B78, 18ACN, 38BRN, 17BN.

Mon.19.9: 8 00 Down — B82, 4BN, 49BRN, 51ACN; 14 45 Down — B80, 1BN, 52BRN, 54ACN, VHBY91; 15 45 Up — B61, 14CW, 8AS, 60BES, 33BE, 15BE; 59BES, RM61 at Werribee.

Tues.20.9: 8 30 Up — B64, 7BW, 57BE, 55BES, 52AE, 4CW; 10 00 Down — B82, 30ACN, 29BRN, 28BN; T350, 68BW at Werribee.

Sat.24.9: 6 30 Up — X31, 2BCE, 5AZ, *Taggerty,* 2BS, 59BE; 495ZL or F, 14 VHWA, 505ZL, ballast train at Lara; 18 25 Down — B82, B75, 18ACN, 38BRN, 17BN, 27ACN, 36BRN, 29BN to Warrnambool.

Mon.26.9: 15 45 Up — B83, 14CW, 8AS, 60BES, 33BE, 15BE; 64RM, 33MT at Werribee.

Tues.27.9: 8 00 Down — B72, 18ACN, 38BRN, 17BN; 54RM, 54AW, 34MT, at Werribee; 505ZL, 14 VHWA, 495ZL, ballast train at Lara; 9 00 Up — B65, CL7 (SAR), AS, BRN, BN, BW; 14 45 Down — B69, VHBY, 8BN, 47BRN, 9ACN; 15 45 Up — B75, 14CW, 8AS, 60BES, 33BE, 15BE; Plasser unit parked at Lara; 58RM, 38AW at Werribee.

Wed.28.9: 8 35 Down — B81, VLPY131, 22BN, 34BRN, 24ACN to Warrnambool; 9 00 Down — X41, 1BN, 52BRN, 54ACN; 64RM, 32AW at Werribee; 9 30 Up — B65, 51ACN, 49BRN, 4BN. (IAM)

Geelong Yard: The following sightings were noted on Wed.28.9:

Y127, Y128, Y129, Y131 at North Geelong Yard.

T376, T341, Y132, F212 at Geelong Loco.

W208 marked U/S and HD174 are permanently stabled opposite North Geelong 'A' signal box.

Two HD wagons are at Werribee. (IAM)

SERVICETON LINE & BRANCHES

Dynamometer car: On Mon.15.8, the 17 55 Dimboola train was seen at Spencer St, platform 1, with S303, N set, plus 2 VLPY and Dynamometer car. (PJ)

Up Jet: On Mon.12.9 A big Up Jet ran through Sunshine at 08 54, being C504 and C509 with 49 bogied wagons and van 8317. (GMcL)

Overland: The *Overland* was hauled by S306-S302-S305 with 14 carriages, motorail, NBAY, on Mon.12.9, seen departing Sunshine at 09 18. (GMcL)

Four-way cross: On Thurs.15.4, a four-way cross was made at Bacchus Marsh. At 12 40, T354 was in No.4 road on the Up Bacchus Marsh goods, with 14 G wagons and ZL. As 11 45, B65-X39-X42, N set was in the platform on the Up Ballarat pass. 56RM was in the dock after running the 11 05 ex Spencer St, when C510 ran through on 9121 Down Jet. (GMcL)

Steamrail: On Sun.18.9, two steam specials ran to Bacchus Marsh for the Nursing Mothers' Association. K153 departed Spencer St, at 10 10 with Steamrail set of cars, plus a Bacchus Marsh set. K190 departed Spencer St at 10 20 with a Bacchus Marsh set.

K153 arrived Bacchus Marsh at 11 10 and ran-around. K190 arrived at 11 28, while K190 turned, K153 took the Bacchus Marsh set (6BCPL-91BPL'75BPL-28BW) to Parwan tender first to do some filming for the ABC television programme "Countrywide". (GMcL)

SERVICETON LINE & BRANCHES

Multi-units sighted at Stawell:

Mon.5.9: T351, T372 T402 — Up goods 48=63, 18 40.

Mon.12.9: C508, X50, X47 — Up Goods 47=109, 13 05.

Sat.17.9: C507, S309, T386 — Up Jet 48=131, 12 55.

Fri.23.9: S301, T325, T326 — Up Jet 44=104, 13 20.

Fri.23.9: S303, T407, T381 — Up Goods 13=20, 22 10.

Sat.24.9: S315, T388, T405 — Up Goods 24=41, 21 45.

Depot visits (Ararat):

Sun.4.9: S307, T326 334 341 344 351 359 365 373 388 400 402 406, W263, Y108 159.

Sun.11.9: S300, T334 337 341 345 359 365 372 377 399 402, W263, Y108 152 159 160.

Sun.18.9: S309, T365 367 381 382 386 388 396, W263, X50, Y137 152 153 159 160.

Sun.25.9: S315, T323 358 377 381 382 398 399 400 405 407, W263, Y137 153 155 160. (PM)

BENDIGO LINE & BRANCHES

Bendigo running: The 09 50 Down Bendigo on Mon.19.9 showed again that the light N sets can gain considerably on the schedule. The loco was B81 with just the three cars; despite a stop of over 4 minutes at the starting signal at Macedon waiting line on a goods train, and a special stop at Malmsbury to set down a party, the train reached Bendigo 3 minutes early in 2 hours 6 minutes 17 seconds from Melbourne. Additional stops totalled 5 minutes 59 seconds, so it is clear that a Down trip of 2 hours is quite possible.

The 14 00 Up train the same day had the same loco, but with a VLPY added to the train. After a speed restriction at Malmsbury, departure from Kyneton was half a minute late, but the train was 4 minutes early by Clarkefield. After this the driver definitely eased the train, with speed down to 80 km/h approaching

Sydenham. Despite a deliberately slow run in from Sunshine of almost 18 minutes Spencer St arrival was 5 minutes early in 26 seconds more than 2 hours. Future N set schedules could realistically be 1 hour 55 minutes. (SRMcL)

ALBURY LINE & BRANCHES

Bright line: A reader has sent in some observations of the Bright line, from Sat.27.8 until Mon.26.9.

Mon.12.9: Goods to Myrtleford and return; Down arrived — Y171, Y172, Y106, ZLP; Up departed — Y172, Y171, ZLP.

Fri.16.9: Goods to Myrtleford and return; Down arrived — Y172, Y166, 2GY, VLCX, GY, 2VLCX, 1VLCX, ALFY, ABAA, VLCX, 2VBAY, NLJX, 2ABAA, 2VBAX, ABAA, ALGX, ABAA, ALGX, 2ABAA, 2ALFY, ABBA, ZLP44; Up departed — Y166, Y172, 12GY, ZLP44.

Mon.19.9: Goods to Myrtleford and return; Down arrived — T392, VBBX, VLCX, VBAX, 2VLCX, VBBX, VLCX, ALPY, CP30; Up departed — T392, ABAA, 2ALFY, 2ABAA, ALGX, ABAA, ALGX, ABAA, 2VBAX, CP30.

Tues.20.9: Goods to Myrtleford and return; Down arrived — T346, 2ALPY, VBBX, VLCX, VBBX, ALPY, ZLP44; Up departed — T346, 2ABAA, NLJX, 2VBAY, VLCX, ABBA, ALFY, 2VLCX, ZLP44.

Wed.21.9: Goods to Myrtleford and return; Down arrived — T347, 2VLCX, ALFY, VBBX, ZLP7S; Up departed — T347, GY, NLGX, VLCX, ALPY, VLCX, VBBX, 2VLCX, VBAX, 2VLCX, ZLP75.

Thurs.22.9: Goods to Myrtleford and return; Down arrived — T333, ZLP16; Up departed — T333, VBBX, 2VLCX, 2VBBX, 2ALPY, VBBX, ALFY, ALPY, ZLP16; final toabcco loading for 1983.

Mon.26.9: Goods to Myrtleford and return; Down arrived — Y139, Y105, 10GY, ZLP73; Up departed — Y105, Y139, ZLP73. (IM)

EASTERN LINES & BRANCHES

Restoring train 'a disaster': "Taxpayers' savings alone should be enough to persuade the Government to abandon their idea of restoring passenger train service to South Gippsland", said the Shadow Minister of Transport and Member for Narracan recently.

"The cost of buying one train is $2.5 m and the current estimate for operating one return service a day between Melbourne and Leongatha is $1.2m per year against this, the coach service has only been costing the taxpayer $200,000 per year since it began operating. In spite of this evidence, Transport Minister, Mr Crabb indicates he still intends to bring the train back once a day, but run a parallel coach service. The Minister of Transport has received the report of the study of public transport needs in South Gippsland at a considerable cost. The report shows that 87% of the general public now favour retention of the coach service, 7% believe it meets current needs but have not used it and the remaining 6% either want the train returned, or have no opinion. To provide a comparable service the transport authority would need to buy three trains — total cost of $7.5 m and together with the extra operating costs the expenditure would be enough to pay for another six coach trips every day". *(Berwick-Pakenham Times)*

MTA Comeng set in the green/yellow colour scheme leaves Dandenong on Thurs.1.9.83. (John Dare)

Works

Hurstbridge line report: This month's report on the Hurstbridge line trackworks will be possibly be the last. During August, with the Plasser and track alignment equipment based at Fairfield, the ballast has been replaced for both the Up and Down lines between Westgarth and Fairfield. Preparations are being made for rail replacement of both the Up and Down lines at the Westgarth platform. To obtain late evening occupation of the line to allow work to proceed, an interesting approach has been taken. Single line operation was used between Westgarth and Fairfield. On 25.8 this was used to gain occupancy of the Down line. The Down trains were run wrong line from the single line from Clifton Hill and stopped at the Up platforms to Fairfield. The train was then run forward into the APM siding from where it set back through the facing (normally) cross-over into the Down platform. After a second stop at Fairfield, the Down train then continued on the Down line. The Up trains worked the Up line as they normally would, subject to the 'temporary' safeworking procedures that would have been in force. (PJS)

Box Hill station: At the Box Hill Transport Centre, demolition of all the remaining shops along the south side of Main St has cleared the way for further excavation of the cutting to provide for the rest of the tracks and platforms. By late August the excavation was almost complete for the full length of the cutting. The Station St bridge is almost finished, while work is proceeding on the retaining wall adjacent to Bank St. According to signs erected around the station, the centre will be completed by the end of 1984. (DSG)

Elaine signals: All semaphore and colour light signals at Elaine on the Geelong - Ballarat line, were noted being dismantled and disconnected early in August 1983. (WD)

Old Hoppers Crossing station removed: Hoppers Crossing's former railway station — replaced recently by a new half million dollar station — was on the move. Contractors stepped in to demolish the station which has stood beside the Hoppers railway crossing for more than 10 years. The new station building is a bricks and mortar affair as compared to the older timber structure.

Laburnum bridgework: The girders of the bridge over Laburnum St between the platforms of Laburnum station were replaced by concrete girders on the original abutments on Sun.14.8. Trains terminated at Box Hill and Ringwood with buses running in between the two stations. The new girders were taken to the site in the early hours of the morning on a train of bogie flat wagons with one ballast hopper and a ZL van at each end hauled by Y107-Y106. The train remained in platform 2 at Blackburn throughout the day. (IW)

Staff exchange box at Wangaratta: On 2.9.83, a staff exchange box was fitted to the Up side wall of the Wangaratta signalbox. Staff exchange box(es?) also to be provided at Benalla. (DMG)

New sleepers — Camberwell to Alamein: The Camberwell - Alamein branch is presently being resleepered. A plant train operated on Sun.7.8, dropping off sleepers from Camberwell, up the hill, over the flyover and then to Alamein. Sleepers were dropped off the Down line only, this train had 12 VOWAs and 2 brakevans. The runaround made possible by leaving the load at the Ashburton home signal, loco detaching and running via the Up line to Riversdale, using the crossover there and coupling up again at Ashburton and pushing back to Alamein.

Another plant train ran on Saturday morning 20.8, conveying only 4 VOWAs this time, and dropping sleepers on the Up line from Ashburton to Burwood. As at time of writing (24.8), resleepering has been completed to half way between Burwood and Ashburton, on the Down line only. (GMcL)

Sale . . . the happening city: One of the few original terminating intermediatory stations is about to be replaced by a new loop railway station. In 1979, an agreement was reached between the railways and the City of Sale, to relocate the existing Sale railway station to a site 0.8 km west of the city. The new site eliminates the need to shunt the engine for the train to continue its journey. The existing site has been transferred to the City Council, where a new shopping development is to be built.

The opening of the Sale - Melbourne line has an unusual history. After much debate in Parliament, authorisation for the construction of the Gippsland line was given on 25th November, 1873. The line was put down in four stages, over six years. The first stage was completed in June 1877, costing £140,499. The first engine to operate on this line was shipped in to the Port of Sale and a spur line was built to run the engine from the port to the main line. Work from the other end was occurring at the same time; from Oakleigh to Bunyip, completed on 8th October, 1877 at a cost of £101,375. For several years travellers had to commute by coach between the two lines. The next stage was 32 miles between Moe and Bunyip, and finally 8¾ miles from Moe to Morwell. The line was finally completed on 2nd April, 1879 at a total cost of £697,547.

State Government is contributing $3.2 million to the station relocation. With the relocation, V/Line has provision for a new railway station, including facilities for the handicapped; freight goods shed, the relocation of the freight office, works area, storage building and covered freight loading bay.

Part of the existing track would be used as a spur line to the goods shed, and the existing spur line to the petrol depots and grain loading facilities would be kept. The port line is not to be retained. With the new station layout, the existing track line and the proposed retail development, there would be no access to the line. Recently there has been movement of oil tankers to one of the commercial premises on the port line.

With the building of the new station, the existing station is not to be entirely disposed of. A submission has been put to the Transport Minister that the station verandah be incorporated into the construction of the covered pedestrian walkway. Local council propose to use part of the station for the new council nursery. The signal box located in Reeves St will be restored and landscaped gardens added as part of the shopping complex carpark.

Estimated time off the trip, without the need to shunt engines, would be between 5 and 8 minutes. The

Minister for Transport, Mr S Crabb, was recently in Sale to officially bury the time capsule that was commemorated to the development of the new loop station.

The site for the new station is in the Y of the junction of the Melbourne - Sale and Sale - Bairnsdale lines. Existing track on the Sale - Bairnsdale section will form the freight centre, which will feature goods shed and covered area. Access to the freight centre is only available to Up trains. This will necessitate trains pulling beyond station limit and pushing back into the yard. Existing oil sidings will be retained within the goods yard. Fertilizer storage will also be transferred to the far end.

The new station yard will feature four loops. The platform will face north/east. Plans also include provision for a bowling green and VRI amenities. The railway easement made vacant by the removal of the Up track access to the old station is to be sub-divided to allow construction of departmental residences. The Way and Works depot will also be transferred to the new site.

The new station is expected to be operational in early November 1984, but work is currently running ahead of schedule. (RM)

Ararat — Portland line works: Work on the upgrading of station facilities on the Ararat - Portland line has begun for the handling of C class hauled wheat trains. The following notes were made during a visit in early September.

Maroona — the junction with the cross country line to Geelong. The existing station yard is undergoing almost complete reconstruction, with a new foundation for yard trackwork being laid. A small grain handling facility has been installed between the goods shed and the cattle race. At the south end of the station, flashing lights and controlling departure single aspect colour light signals have been installed at the level-crossings on the two diverging lines. These were brought into use on 4.5.83.

Willaura — Flashing lights and departure single aspect colour light signals to control these lights were brought into use on 5.5.83, at both ends of the station yard.

Glenthompson — Up end of No.4 road relaid in 90 lb, 94 lb and or 47 kg rails, and a dead end extension provided off this road. This extension is about 100 m long and curves away from the main line. These works will allow easier loading of grain from the small horizontal storage facility at this station.

Dunkeld — The crossing loop at this station is being extended in the Down direction by about half a kilometre. At the time of inspection, No.2 road had been relaid, and extended to within about 100 m of the point where it will rejoin the main line. A new 53 kg rail turnout was being assembled alongside the main line to form the Down end of the loop. The old Down end turnout has been removed from the main line and used to form the new turnout from two to three road, and positioned near the former Down end of three road extension. No.3 road itself has been relaid in 94 lb rail. The station was being used as a crossing station, with trains needing to back in one direction when crossing another.

Hamilton — reconstruction of the bridge at the Down end of the yard is complete (WAD)

New rail spur: The $30 million Elders IXL woolstore complex is to go ahead — at Corio. The sight is approximately 2 km north of Geelong railway station and 1 km west of existing line. The Minister for Economic Development, Mr Ian Cathie, said the world's biggest woolstore — would be built in Heales Rd, Corio. "The cost to the State of providing the infrastructure — rail power and drainage — will be much less than if we had proceeded on the site originally proposed at Oyster Cove", he said.

The site in Heales Rd, near the GRC's 234 ha. industrial estate, was selected, and the GRC purchased 38.5 ha on behalf of Elders IXL. A rail spur will be constructed into the site from the Melbourne Geelong rail line. The new railing, electricity and drainage infrastructure will be suitable for further development in this area. (IAM)

Box Hill works: At the Box Hill Transport Centre, earthworks for the two additional platforms and tracks are well advanced, the current Down platform is becoming an island platform. The Bank St retaining wall is complete, while the Station St bridge is complete except for details. (DSG)

Track work west of Stawell: Extensive track work continues to cause delays to trains west of Stawell. On occasions the Down Horsham pass. is terminated at Stawell and the connection made by bus. Work sites are — relaying west of Glenorchy, bridge work west of Glenorchy, sleeper renewing — Deep Lead. (PM)

New boom gates for Geelong North: Boom gates will be installed at the dangerous North Shore rail level-crossing next February. Simultaneously to the boom gate installation, the adjacent road approaches will also be altered to assist the flow of road traffic. (IAM)

Ringwood - Croydon duplication:

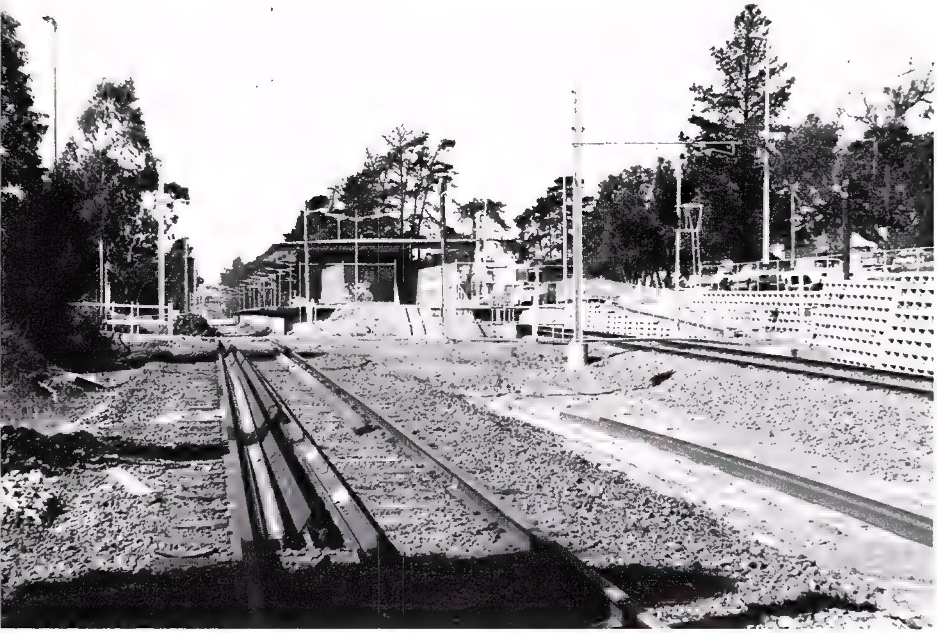
Croydon: The old line is still in use until just short of the Dublin Rd level-crossing. Some ballast has been laid for the Down track. A point for the new junction has been laid on the Up side between the stabling siding and the old line. A point has also been laid for the additional stabling siding.

Ringwood East: As mentioned in *Newsrail*, September 1983, p.248, the new line is in use from Dublin Rd through the new Up platform face, to just beyond Ringwood East, where it cuts onto the old line again. Track has been removed and the ballast excavated on the Down platform. The Down platform has been refaced and resurfaced, and the foot crossing rebuilt at each end. At Ringwood East the overhead is at the stage of having droppers and conductor hanging, but no track beneath. From Ringwood East to Croydon, new track has been laid on concrete sleepers for nearly the full distance, with the exception of a short section opposite Yarraduct Place (Melway map 50 G6) where the line crosses the O'Shannassy Pipeline. Work to protect the pipes and subsequent rain appear to have delayed this part. Ballasting is complete from Ringwood East to this point.

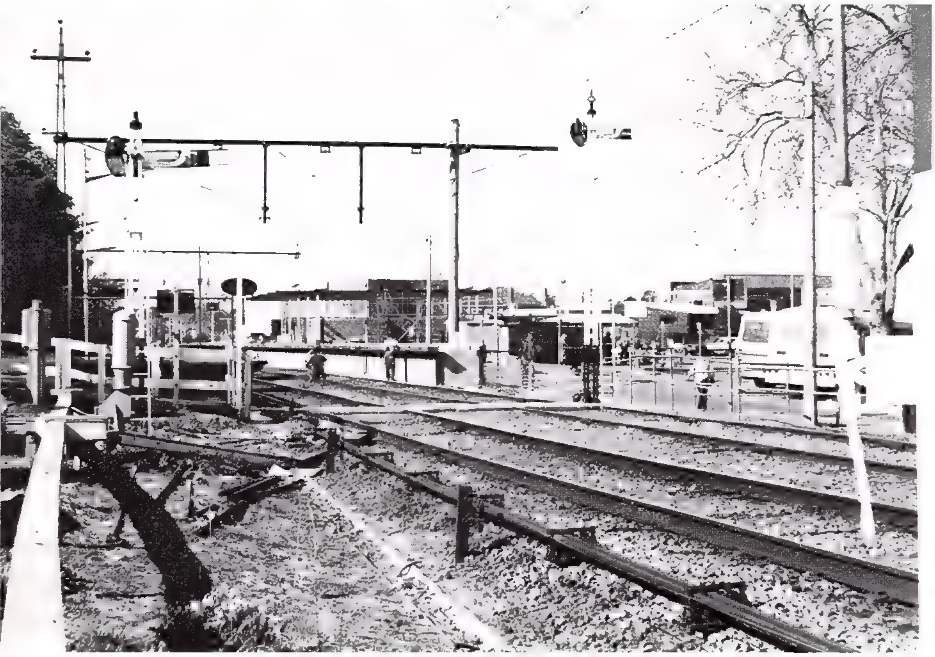
Croydon: The new Up platform has been built and is partly filled. Work on the new station building has commenced, and the steel frame is complete and bricklaying has commenced. This occupies part of the carpark. Work has also commenced on reclaiming another section of the carpark, on the Up side to provide the new Up line out of Croydon. This involved raising the surface about one metre. Throughout the new line staunchions are in place and have insulators attached. Signals have been erected (searchlight type) and those not in use are masked. Concrete sleepers are used for the whole length. Commuters will welcome the opening of the double track as currently trains have often to wait for empty late running trains to clear the section. The 07 43 from Lilydale has stood in view of waiting passengers at Croydon for up to 15 minutes on several occasions. (DMcA)

Dual gauge: Over the past few weeks, the standard gauge line from Dynon to Spencer St has been converted to dual gauge from the carriage sheds to the first curve of the flyover (the Dynon end of the bridge), while the storage tracks, etc., are undergoing alterations and rearrangement.

The Spencer St end is also undergoing alterations, all in aid of the "*Overland* and *Vinelander* special works", as is painted on one length of track — the project to shift these cars to Dynon for cleaning and maintenance.



The former single line has been terminated just short of East Ringwood and the line lifted through the Down platform, while tracklaying proceeds between East Ringwood and Croydon.



Work in progress on the new Down platform at Croydon which is adjacent to the Croydon bus station. 26.9.85. (Both photos Peter Pugh)

Rollingstock

V/Line passenger carriages: Continuing with our list of V/Line passenger carriages currently in use, here is the other half of the list we featured in last month's issue of *Newsrail.*

Class	*No.*	*Built*
BWL	66	4/1927
	67	4/27
	68	4/1927
BW	80	4/1926
	82	8/1926
ABU	32	4/1914
	40	6/1914
BPL	89	1918
	91	1918
	38	12/1920
	43	4/1921
	54	7/1921
	73	12/1920
	70	9/1920
	75	12/1920
	84	12/1920
BCPL	29	5/1921
	6	4/1922
	11	12/1921
MBS	1	11/1937
	2	11/1937
	3	12/1948
BRS	10	12/1956
Avoca		1927
Moorabool		6/1939
Murray		11/1937
Taggerty		1910
Sleeper	1	1928
	2	1928
	3	1928
	4	1923
	5	1923
	6	8/1923
	7	8/1923
	8	8/1923
	9	8/1919
	10	10/1907
	11	12/1949
	12	3/1950
	13	12/1950
	14	12/1950
	15	7/1940
	16	6/1940
AG	52	8/1908
BW	60	10/1926
	62	10/1926
	64	4/1927
	65	7/1926
BWL	70	7/1927
BU	4	12/1911
	5	11/1911
	9	12/1911
	13	9/1912
	14	6/1912
	16	8/1912
	18	8/1912
	20	9/1912
	22	9/1912
	27	2/1914
	41	6/1914
	42	6/1914
	47	7/1925
State	4	5/1912
	5	4/1951
Goulburn		11/1908
Melville		4/1901
Norman		11/1937
Yarra		10/1906
CA Van	1	9/1960
	2	9/1960
	3	10/1960
	4	10/1960
	5	11/1960
	6	2/1961
	7	3/1962
	8	3/1962
	9	3/1962
	10	4/1961
	11	5/1961
	12	5/1961
	13	6/1961
	14	8/1961
	15	9/1961
CE	9	8/1908
	11	10/1908
	13	11/1908
	15	7/1908
	18	2/1911
	19	3/1911
	24	4/1911
	29	11/1923
	31	11/1923
	33	12/1924
	35	12/1924
	37	12/1924
VAM	1	11/1963
VBK	1	5/1959
	2	7/1959
	3	8/1959
	4	5/1959
	5	11/1959
VFK	1	2/1960
	2	12/1959
	3	2/1960
	4	4/1960
	5	2/1962
	6	3/1959
VFS	1	10/1955
	2	1/1956
VFR	2	7/1955
VFX	1	4/1956
	2	6/1956
VRS	1	2/1939
	2	12/1938
	3	7/1939
VHN	1	11/1937

(KW)

Modified L class: On Fri.2.9, the Bayswater goods was hauled by L1166, which has had one of its pantographs replaced by one of the type fitted to the Comeng suburban trains. (DSG)

Harris parcels coaches: Consideration is being given to converting a number of suburban electric Harris motor cars to parcels coaches to replace existing aged swing-door and Tait vehicles. (POT)

Extra power for locos: Programmes for enlarging and upgrading our locomotive fleet are well advanced.

At Clyde Engineering's factory at Rosewater, South Australia, six B class locomotives are at an advanced stage of reconstruction. Four first-series T class diesels are now undergoing similar upgrading work at Clyde's Somerton plant, north of Broadmeadows.

First B: The first rebuilt B class diesel is due to return this November, while the first T class loco is expected back in December 1983. To enable the upgraded B class to be distinguished from the original series, these rebuilt locomotives will be classified as A class. They will retain their original road numbers. The A class locomotives will be equipped with 2450 hp turbo-charged engines. Original B class diesels have 1600 hp engines. Other features include full cab airconditioning, and reduced internal and external noise levels. The 13 T class diesels being rebuilt will also be reclassified. They will become P class and will be given new road numbers from 11 to 23. The first P class diesels to enter service will be used on the Stony Point and Leongatha lines. They will haul Harris cars at present being converted to operate these InterUrban services. To supply power for carriage airconditioning and lighting, the P class diesels will be equipped with an auxiliary diesel-alternator. Other features include increased power (1050 hp compared to the original 875 hp) and cab airconditioning. This extra on-baord equipment wil increase their axle load to 19 tonnes and therefore the P class will be restricted to lines laid with a minimum of 40 kg/metre rails.

New designs: The 20 locomotives to be constructed will have a double-ended, full width cab design and will be similar in appearance to the 422 class and new 81 class diesels of New South Wales. Half of these new locos will have 2450 hp engines and these will have 'head-end' power supply for passenger train airconditioning and lighting. The remainder will have 3300 hp engines for main line freight operations. First deliveries of the new diesels are expected in the second half of 1984. In order to catch up on deferred locomotive maintenance, the major overhaul programme has been virtually doubled. Most of this work is being undertaken at Newport Workshops. Significant orders have also been placed for additional locomotive spare parts. These have been badly needed for some years, but, due to financial restraints, could not be purchased. Our L class mainline electrical locomotives are also being upgraded.

Pantographs: To overcome electric current collection problems, Brecknell-Willis pantographs are being fitted. These collection problems have been diagnosed as a contributing factor to the many traction motor failures which had been experienced. Overhauls of traction motors are also being speeded up. So, within the next three years, our overall locomotive fleet should be in much better shape than at present. This will then permit the remaining F and W class shunting engines to be progressively retired and give the State Transport Authority the capacity to provide consistently reliable and competitive rail transport. (WDSRS)

New N sets and refurbishing old: New carriage set N18 was seen in service on 13.9.83 at Spencer St. It consists of ACN54, BRN52 and BN1, Set N1 has been missing for some time and although not seen, will return as ACN3, BRN53 and BN2.

V/Line has been refurbishing BE A/C carriages (51AE, 52AE) so it looks as if they will continue running for some time and perhaps we will see 1AG (ex 1BG and now missing from service for quite some time) and 2AG (ex *Taggerty* when it is no longer required).

Two ex SAR carriages numbered 1BK and 2BK have entered service recently replacing a BG on the former Gippsland sets of AS, BE, BE, BE. They are frequently seen on the Geelong line. (WJ)

Country carriage roster: A few last minute changes were made to carriage roster N18 before it came into operation in August.

The N set on Run 13 now runs the 10 00 Up Traralgon (due Spencer St 12 40) and the 17 40 Down Traralgon on Saturdays. Run 19 (07 44 Traralgon - Dandenong Sats.) goes off on arrival at Traralgon. On Sunday nights the 20 35 arrival Horsham forms the 21 25 Geelong, and Run 9 off the 20 20 arrival Warrnambool forms the 22 25 Geelong. Run 8 Fridays forms Run 13 Saturdays, and Run 14 Fridays forms Run 14 Saturdays. Run 11 Sundays forms Run 13 Mondays, and Run 14 Sundays forms Run 14 Mondays.

The new roster appeared to be working reasonably closely to plan during September, although one of the CD vans had found its way onto a *Vinelander* set, leaving orange 33CE on one of the Albury/Swan Hill sets. Towards the end of the month one of the *Vinelander* buffet cars failed, and the set was replaced with the Swan Hill set; an odd airconditioned set with no buffet car which ran captive on Swan Hill services with refreshment stops at Bendigo. Albury sets were disorganised at the end of the month with the 17 20 Down on Wed.28.9 being B74-24BE-29BE-3BRS-51AEa/c-33CE and the 16 25 Up the same day an N set.

DRC43 spent a couple of weeks out of service during the month, and its place was taken by passenger trains. On Sat.3.9 the cars on the 18 35 Down Seymour were 32BW-44BE-1AS-13CW-12AE-43BW-14BE-29BCPL. On Thurs.15.9 the 15 10 Down Kyneton was T327-26BE-2AE-37CE. This set had had 32AW added to it when it ran the 18 55 Down Seymour the following night. The 05 50 Up Seymour on Mon.19.9 was T363-T369-156CE-13AE-31BW-38BW, and T412 dropped on at Spencer St to form the 08 05 Kyneton. (SRMcL)

Locos and N sets: Most trains formed by N sets are run with B locos, although the Dimboola train usually has an S, and X locos to Shepparton and Bendigo are not unusual. On Sat.17.9 the 17 40 Traralgon had three locos on a three car train: T352-B79-B69 and an N set. On Mon.19.9 the 06 45 Up Ballarat had the three car N set and three locos in different colour schemes: B80 (orange)-S309 (blue)-T386 (grey). The 19 15 Down Ballarat on Sun.18.9 and the 07 45 Up the next morning were both an N set hauled by C501. The Up train reached Spencer St only 2 minutes late. A 19 55 additional Cobram train on Fri.23.9 was an N set hauled by T363. This train was 25 minutes late from Spencer St and was further blocked by the Wodonga oil train, and reached Seymour 34 minutes late. (SRMcL)

V/Line locos: Since the introduction of the new colour scheme several weeks ago, several locos now sport these colours: B84, L1156, X47, T386, Y146, Y173, Y174, Y175 are all in service, while Newport on 2.9.83 contained Y163 (ready), T386 (since released), X45, X49, T350, T393, T361 all at various stages of overhaul, while a stripped T353 was being steam-cleaned prior to overhaul. X32 was also listed as being present, but I couldn't see it — it may have been in the paint shops. L1150, L1160 and L1174 were also under repair. Dynon on 28.9 contained a stripped T370 and an S class body painted with a white undercoat or primer, with some patches of blue and gold still showing No. 310.

Sets N1 and N18 combined: Sets N1 and N18 have combined, giving 1BN, 52BRN, 54ACN and 2BN, 53BRN, 3ACN, both in V/Line colours, as is N17, composed of 4BN, 49BRN, 51ACN.

Spectrum of colours: T350, at Newport on 2.9, was a spectrum of colours — both ends and cabsides were orange, the removable part of the body which covers the engine, was grey, the rest of the long end around the side grilles, was white, while the roof radiator grille was still blue, with a bit of yellow on its sides where the T's stripes had been — quite a transition between schemes.

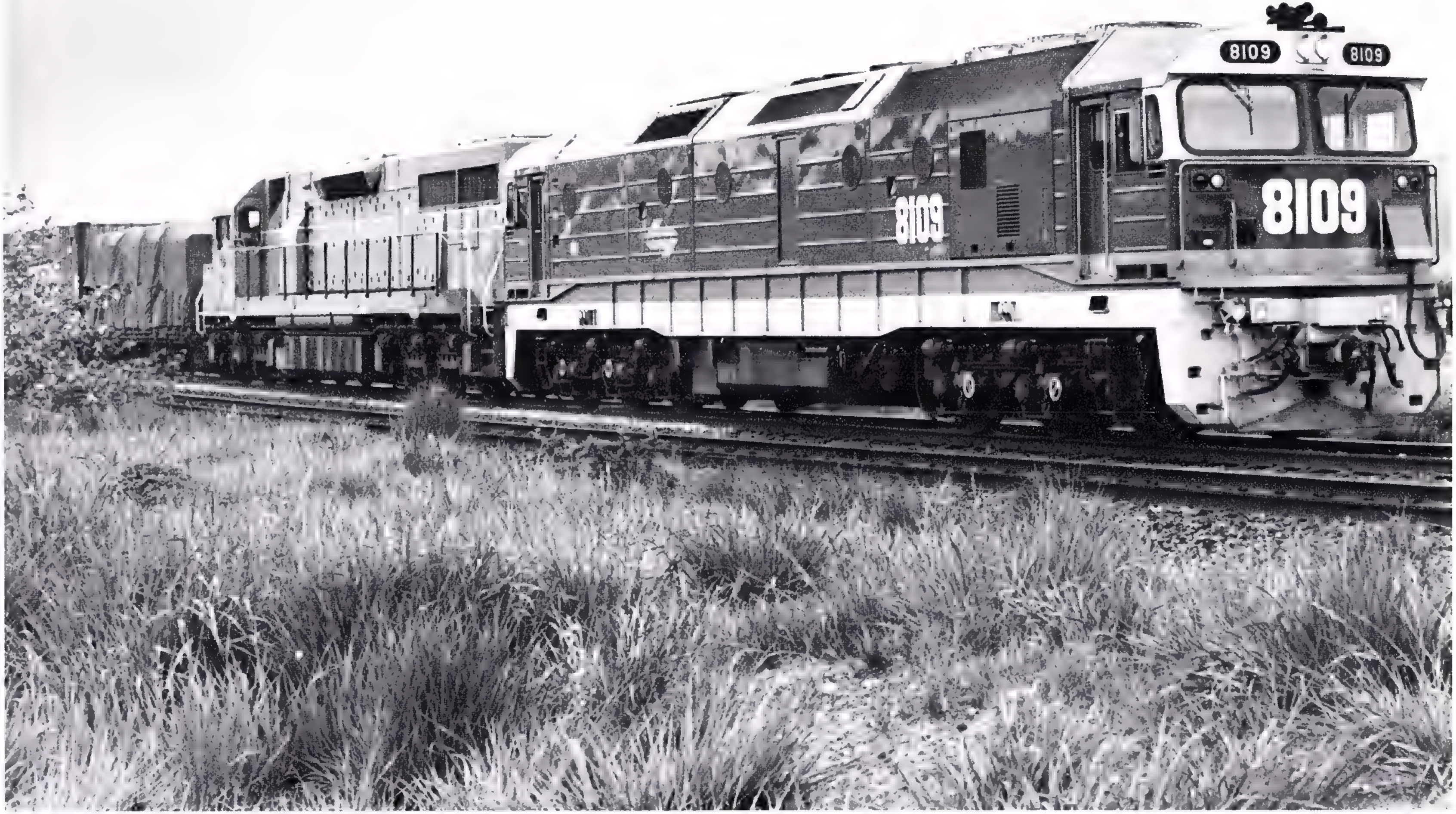
Wrong!: When I saw T394 and T333 emerge fresh in the old colours only weeks before V/Line, I thought they would be the last. However, on 2.9, C502 and X37 both stood at Newport, ready to re-enter service following overhaul, in the old blue and gold — the big power is thus the last to receive blue and gold.

Parcels van: A new coding for orange and silver parcels vans is in use — to date, three are in use — they are the same as the orange VBPYs, but in place of the 'pudding bowl', they have the V/Line logo, and are numbered D322, D340 and D346. D340 only has the stripes — it hasn't yet received the logo, and thus it is identical to VBPY120, which also only has stripes.

X44 on Down Daylight: X44 headed the Down *Intercapital Daylight* on 14.9, it ran the same train the following day, 15.9. X46 did the honours on 19.9 with this predominantly 422 class hauled train.

B61: B61 has a rear-vision mirror on the observer's side, No.2 end. I haven't seen if it has the same at the No.1 end. T386 (now V/Line) no longer has the mirrors I saw it fitted with shortly before overhaul.

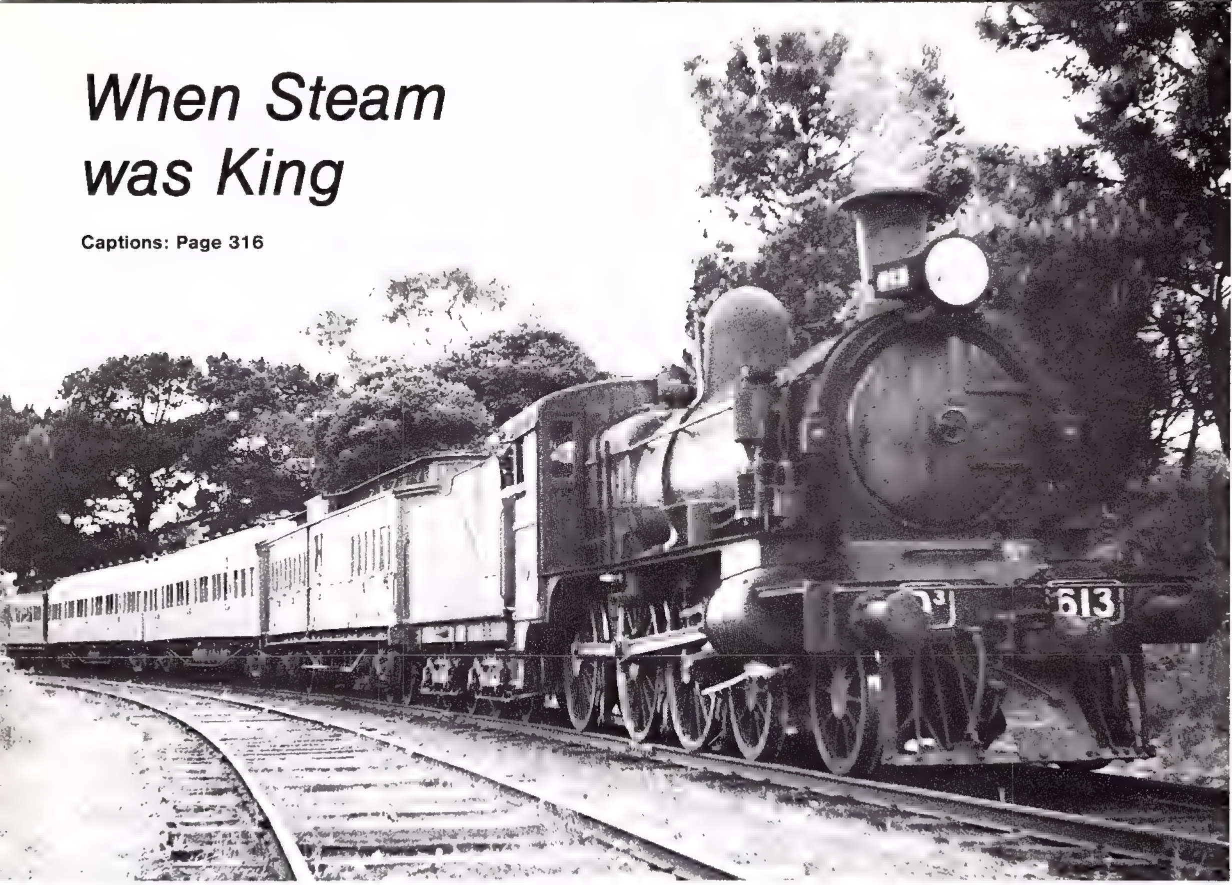
Up Vinelander: 16.9 — X35 and T350 (back-to-back) red VBPY (VLPY?), CD3, 6AZ, 3MBS, orange 6BZ and 12BS, V/Line N18 (54ACN, 52BRN, 1BN), blue sleepers Nos. 5 and 4, *Vinelander* cars Nos. 13 and 11, and Motorails (VMAY?) Nos. 9 and 8.

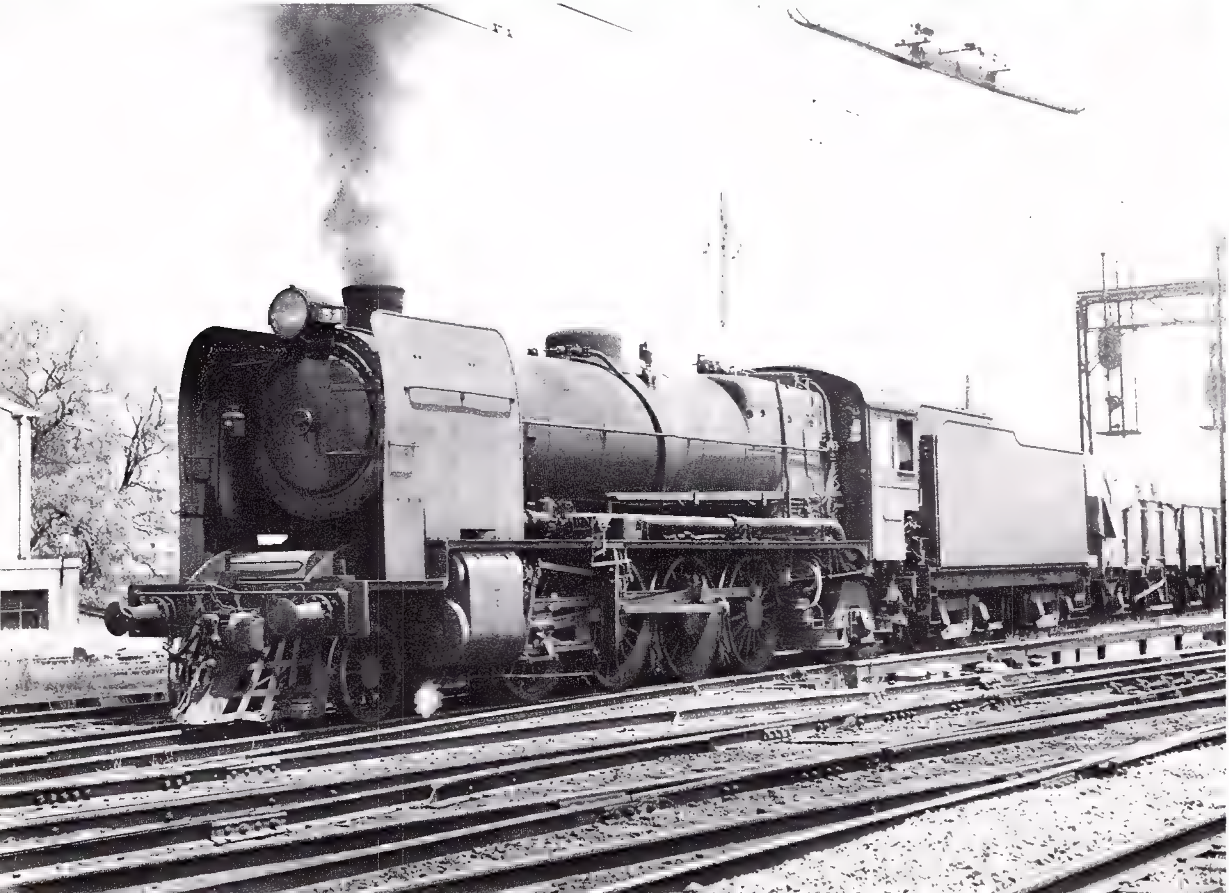


NSWSRA's 8109 delivers the Victorian STA's latest acquisition, former Westrail L252 over the main line south of NSW on Thurs.13.10.83, as part of the load of freight 1491. Pictured outside Goulburn, it was the second L class to go to Victoria, L253 going through on Fri.7.10.83. (Leon Oberg)

When Steam was King

Captions: Page 316





J546
J 550

R 720
712

Delays, Derailments, etc.

Freight derailment: A standard gauge freight derailment on Sat.20.8.83, closed the standard and broad gauge lines. The accident occurred at the Baddaginnie - Goomalibee Rd level-crossing, 6 km north-east of Benalla. The 11 wagon train was hauling mixed freight containers, 50 tonnes of bulk cement and the chemical polyethylene to Albury when the accident occurred at about 23.15.

A V/Line spokesman said that about 300 metres of standard gauge and 100 metres of broad gauge track had been damaged due to the accident. Luckily no one was injured in the derailment which was thought to have been caused by a faulty wheel. (IBB)

Overland derailment: On Tues.23.8.83, the *Overland* left the tracks at about 09 00, at Parwan, just east of Bacchus Marsh. The *Overland* had been waiting in the loop for a passenger train to pass, and was starting to pick up speed, when the fourth carriage left the tracks, dragging five other carriages with it. It is thought that several old wooden sleepers collapsed, causing the lines to spread. The Transport Minister said that the lack of proper maintenance was a contributing factor in the derailment.

An official at the scene of the accident, said that there was only minor damage done to the carriages, and also the track itself. Trains were re-directed through North Geelong while the *Overland* was rerailed and the tracks re-aligned.

None of the 268 passengers were hurt in the accident, although several were badly frightened. (IBB)

Horsham pass. derailment: This was a minor accident and it was a credit to all concerned that all vehicles were rerailed so that there were no delays to services.

The drama began when the Down pass., which had been terminated for some time at Stawell was being shunted for servicing. The procedure has been to allow the loco to run round the cars and then head them into the lightly laid siding normally used to unload superphosphate and briquettes.

On this occasion the loco (B63) derailed two wheels of the rear bogie, van VBPY113 four wheels and 18ACN 2 wheels. The other cars 30BRN and 17BN remained on the tracks. The cause appeared to be the poorly maintained track. (PL)

Warnambool pass.: On Wed.10.8.83, No.8235 pass., which was hauled by a tangerine B class, stopped at Moriac after running slowly for several kilometres. Passengers were informed that the locomotive was low on water. The guard was unable to unlock the station door to obtain access to a tap. Control was notified and in due course a CFA tanker was used to water the locomotive. The train was delayed at Moriac for about 45 minutes, during which time No.8256 pass. was crossed. These trains normally cross at Winchelsea. (WDSRS)

Daylight delayed: On Wed.24.8.83, the Up *Daylight* was delayed by various factors. Departure from Albury was 36 minutes late at 17 24, with a 5 minute stop at Chiltern loop to let X44 cross on a Down goods. A stop at Benalla loop, from 18 42-18 54 to wait for X54 on an Up goods to clear the section, increased the delay. Then slow running occurred at the derailment site near Benalla, and slow running from Kilmore East to Wandong, meant that the train would have to stop at Sunshine to drop off people for the *Overland* and the *Vinelander*.

Slow running over the Maribyrnong River bridge, through Tullamarine loop, where the Down *Aurora* was crossed, plus further slow running and a stop near McIntyre loop, brought the train to Sunshine at 21 22. Here passengers for the *Overland* and *Vinelander* got off, and departure from Sunshine was at 21 25, and eventually arriving at platform 1 at 21 45, 85 minutes late. (GMcL)

Railway line re-opens: V/Line re-opened the Natimuk to Carpolac railway on Monday 26.8.83 following a derailment near Mitre. A V/Line spokesman said one 10 mph speed zone had been placed on the repaired line while workmen had further work to do. The speed limit lasted until 3.9.83. Five grain wagons left the line near Mitre.

Heywood derailment: On Tues.30.8, six loaded briquette wagons were derailed just out of Heywood on a train bound fot Mt Gambier. The line was blocked for a number of days until rerailing and track repairs were completed. The line was reopened on 3.9. Two briquette wagons remained alongside the line at the time of inspection during late September. (WAD)

Overland in strife: On Sun.4.9 the Down *Overland* (ex Melbourne 3.9) was noted leaving Stawell at 07 00 (about 6¾ hours late!). The cause was defective under gear on two of the cars. They were eventually removed at Ararat. The offending cars were *Yanni* and 3AJ. The Up *Overland* was delayed at Stawell until 07 05 awaiting the cross.

Also held up were two Up Jets which resulted in a most unusual early Sunday morning peak at Stawell. The Jets were: C507, C508 — Up Jet 27=78 at 07 45; C510, C506 — Up Jet 42=104 at 08 30.

Due to track repairs just west of Ararat, the Horsham pass. hauled by B75, B66, was terminated at Ararat on that day. (PM)

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WHEN STEAM WAS KING Page 314

Top left: D3 613 sits at Stony Point at the head of a local service on 25.12.57.

Bottom left: X52 steams quietly past South Kensington and winds its way into the Melbourne yard. 12.1.59. (Both photos Bruce Bredin)

Top right: J546 and J550 on a searing day at Ballarat Loco, Thurs.6.1.66.

Bottom right: R720 and R712 enjoy the winter's sun at Geelong Loco on Sat.26.6.65. (Both photos Graham Withers)

Taildisc

Residents oppose light rail: The residents of South and Port Melbourne have called on the State Government to retain existing train services on the Port Melbourne and St Kilda lines. At a meeting in the South Melbourne Town Hall local people declared their strong opposition to State Government plans to introduce a light rail system of public transport.

The meeting voted to continue to fight for the preservation and improvement of all present public transport services in the South and Port Melbourne area. It was called by South Melbourne council to inform residents of proposed changes to public transport in the local area and Council policy to the changes.

The State Government wants to demolish the Yarra River rail bridge which carried the Port Melbourne and St Kilda train services to Flinders St station and replace the trains with light rail vehicles.

For Port Melbourne the LRVs would travel from either Beacon Rd or Graham station along the rail reservation to Clarendon St, where they would link up at street level with the St Kilda LRVs entering the city on the same track.

For St Kilda the light rail service will begin at the intersection of Carlisle St and Brighton Rd, travel along the St Kilda rail reservation as far as Clarendon St then enter the city at street level via the Spencer St bridge.

The light rail service will link up with Flinders St via a separate loop routed from Spencer to Bourke, Spring and Collins Sts.

The Port Melbourne Council has re-affirmed its support for State Government plans to introduce a light rail system of public transport.

100 Years ago: The traffic on the Deniliquin, Echuca and Moama railway lines was very heavy 100 years ago. The main reason for this was the large consignment of stock passing through the area on their way to the Melbourne markets. Four special trains left the Echuca station and the ordinary trains were heavily freighted. Heavy traffic on the lines was expected to continue with further arrivals of wool, timber and stock. In addition to wool arrivals by railway and river, a considerable quantity was being delivered by teamsters. More than 135 bales were received at the Echuca station for transit to Melbourne on 11th September, 1883. *(Riverine Herald)*

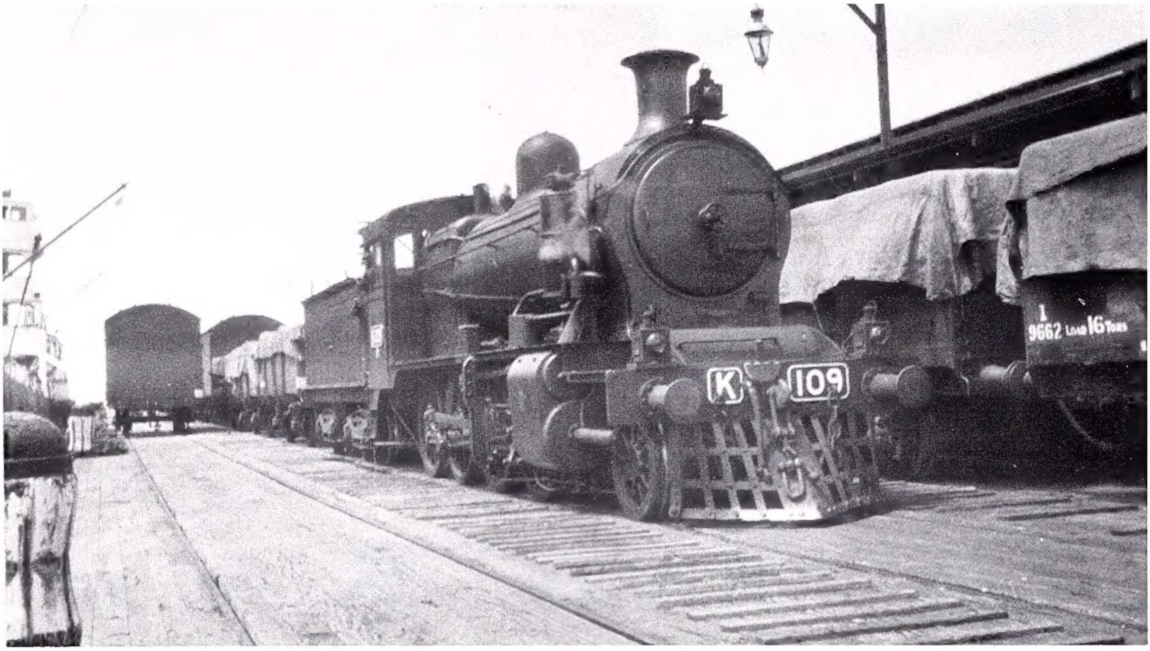
Narrow gauge diesel rebuild: During a visit to *Puffing Billy* on Fri.16.9, "Sir John Grice" (Peckett 1711 of 1926) was in steam in Belgrave yard, coupled to a new diesel locomotive, numbered NRT1. This loco (or rail tractor?) appears to be an extensive rebuild of Ruston & Horns by 296058 of 1951, a 4 wheel diesel mechanical loco donated to the society by the Board of Works in 1978.

RAILWAY QUIZ

Last month's answer: The first country line in Victoria was opened by the Geelong and Melbourne Railway Co on 25.6.1857. It ran from a private village area of 90 acres between Melbourne Rd and the Yarra River, now part of Newport, to Geelong.

This month's question: What was the shortest branch line opened in Victoria?

John Buckland was only a small boy when he ventured onto the ocean pier at Portland and photographed K109 shunting in 1926. This was his first railway photograph.



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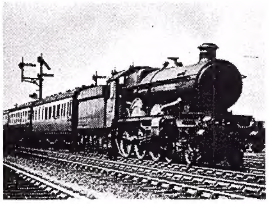
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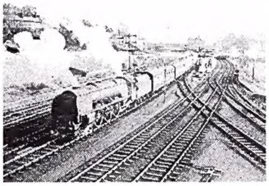
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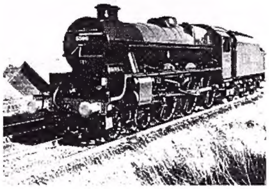
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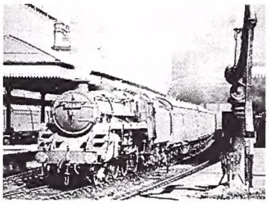
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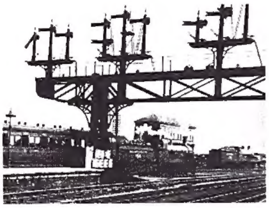
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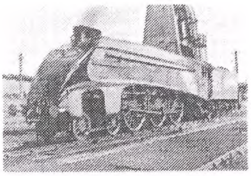
B15	No. 673 Midland Railway Preservation Centre
B16	IVATT No. 6441 at Steamtown Museum, Carnforth
B19	EVENING STAR No. 92220 at Shildon
B20	FLYING SCOTSMAN No. 4472 leaving Hatfield
B21	GOLDEN ARROW No. 34085 "501 Squadron"
B22	GREEN ARROW No. 4771 near Kents Bank
B25	LNWR No. 790 HARDWICKE near Grange-over-Sands
B26	HENRY OAKLEY No. 990 at Shildon
B23	GREEN GODDESS Romney, Hythe & Dymchurch
B27	IVATT no. 41241, Keighley & Worth Valley Railway
B28	KING GEORGE V No. 6000 Sonning cutting
B29	LAST STEAM TRAIN Nos. 44781 and 44871
B30	MALLARD No. 4468 World Speed Record, July 1938
B31	MAYFLOWER No. 1306 at Steamtown Museum
B33	SIR NIGEL Gresley No. 4498 Steamtown, Carnforth
B34	SOUTH YORKSHIREMAN No. 5231
B35	WINSTON CHURCHCHILL Battle of Britain Class No.
D35	Class 45 Diesel on Dainton Bank
B36	ROYAL SCOT No. 6100 at Bressingham Museum No. 34051
D36	Class 47 Diesel near Wellingborough
B37	LNER Class B12/3 No. 8472, North Norfolk Railway
B38	HIGH SPEED TRAIN No. 254-009, Peascliffe tnl.
B42	FLYING SCOTSMAN No. 4472, Steamtown, Carnforth
B44	CREPELLO Class 55 Deltic No. 55012
B45	WESTERN STALWART No. D1006
C46	LNER Flying Scotsman advertising poster 30″ x 19″
C47	SILVER JUBILEE advertising poster 30″ x 19″
B48	ADVANCED PASSENGER TRAIN No. 370 004
B49	CHELTENHAM Ex-SR Schools Class No. 925
B50	ROCKET at Rainhill Trials 1980
B51	LORD NELSON Ex-SR No. 850
B52	LEANDER No. 5690 with vintage LMS Coaches
B53	PRINCESS ELIZABETH No. 6201 Bulmers Steam Centre
B54	SLIEVE GULLION
C83	North Yorkshire Moors Railway No. 5
A89	ELDER DEMPSTER No. 35030 Merchant Navy Class
A88	48152 Climbing gradient 1 in 75 to Shap
A89	No.45738 SAMSON Jubilee Class, Lakes Express
A90	No. 61230 Hastings to Sheffield train near Hucknall Cen
A91	CLAN MACDONALD No. 72004, Glasgow - Liverpool
A92	No. 73031 B.R. Class 5 leaving Nottingham Victoria
A93	ANTHONY MANOR No. 7801
A96	CAERPHILLY CASTLE 4073 Reading 1937 (Sepial)
A97	CALEDONIAN RAILWAY No. 123 Race to the North
A98	CITY OF LICHFIELD No. 46250 "Coronation" Class
A99	GWR county of MERIONETH No. 1019, 1946
A101	HYMEK light engine 1970
A102	LNER IVATT Atalantic No. 4422 near Riccall May 1935
A103	LMSR Jubilee Class BAHAMAS
A105	KING HENRY VIII, GWR King Class, 1927 (sepia)
A106	Midland KIRTLEY No. 3 in Derby paint shop, 1926
A107	MALLARD No. 60022, steam world record, 1938
A108	Queen Mary No. 6222 Hauling Coronation Scot.
A109	LNER A4 Pacific Quick Silver No. 2510, 1936
A110	Silver Fox, A4 Gresley Pacific, 1935
A111	Southern Belle, crossing Ouze Valley Viaduct
A112	SE4 CR Stirling No. 1 194 leaving for Canterbury
A113	SR WAINWRIGHT No. 1477 Bromley South, 1934
A114	LMSR WEBB No. 8535 at Verney Junc. 1936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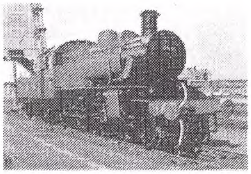
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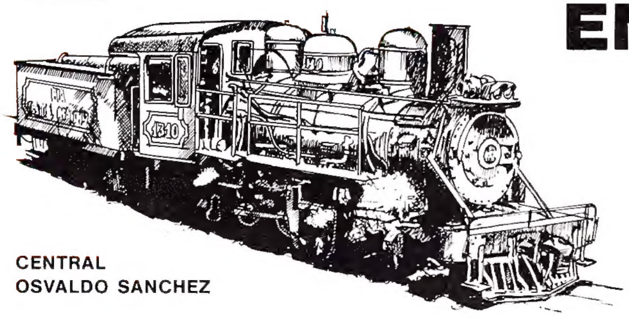
OVERSEAS HOLIDAYS FOR RAILWAY ENTHUSIASTS



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